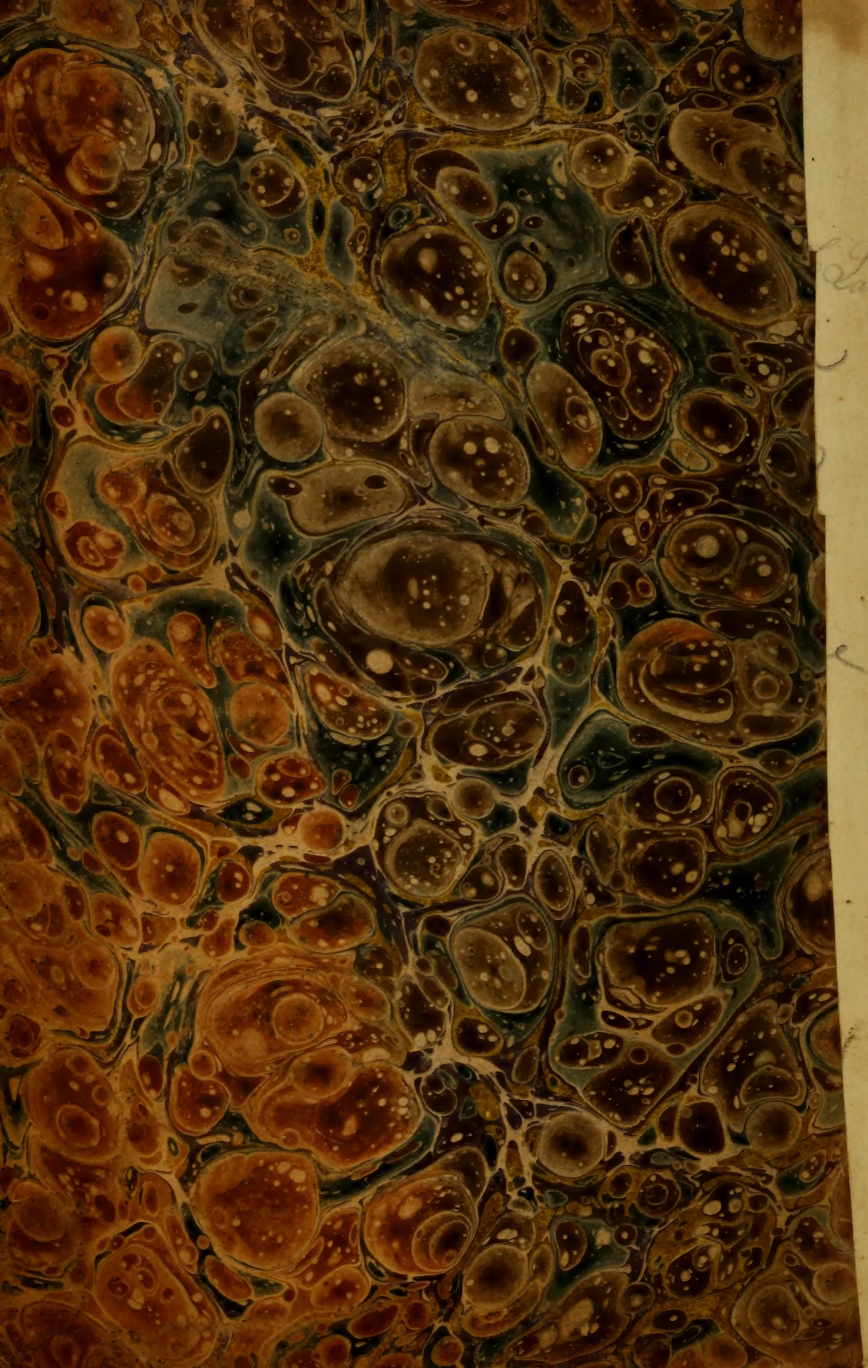


J A Eve m.d

Unavoidable and accidental, the former when the is placenta funia the latter when the placenta is loosend from the uterus = diagnosis by vaginal touch the unavoidable is when the placenta is over the mouth of the uterus = the accidental when the placenta is partial displaced from the walls of the uterus Treatment, Palliative & Medical the former when early pregnancy exists, if in the last months of

Tom Means Lucas Ford Eve

Joseph D. Eve

Wade D. Moore

Hamberg Augusta

Jos. D. Eve M.

Augusta

Highland Eve

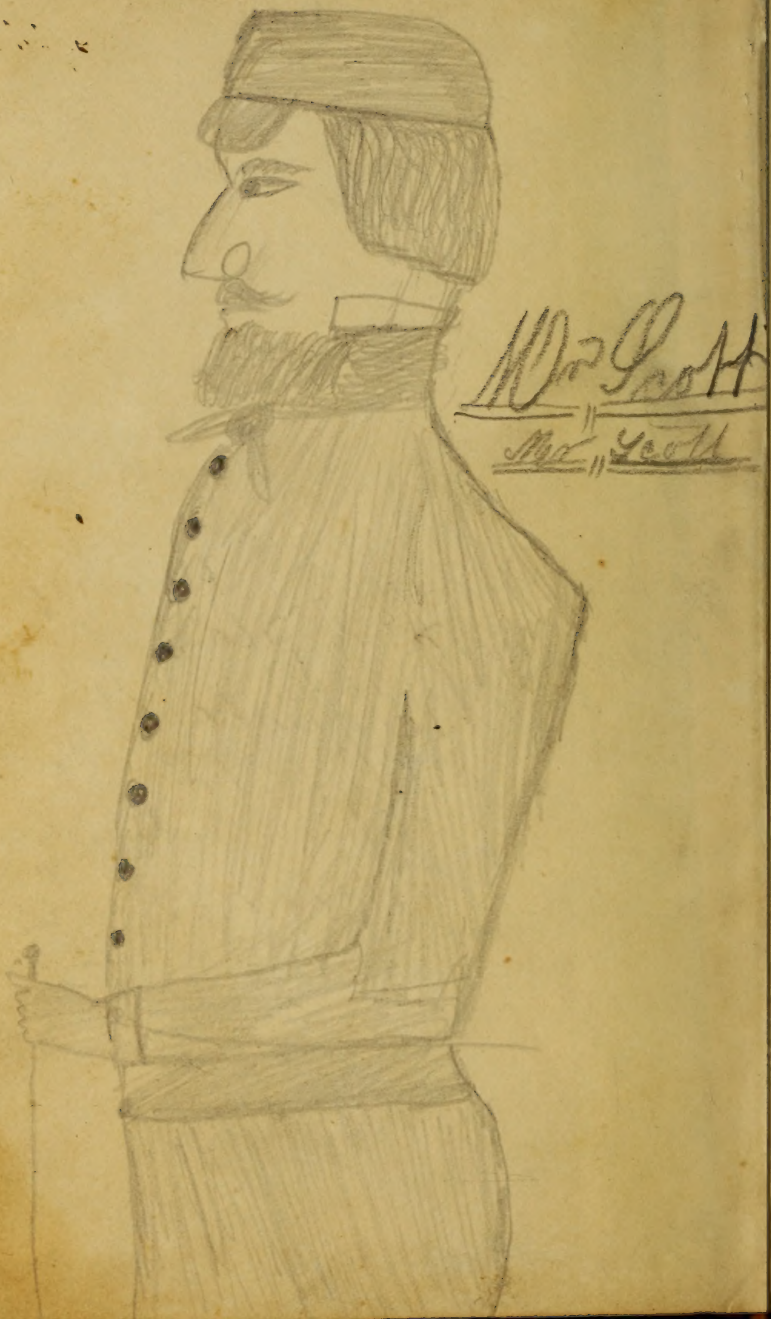
Jos. A. Eve Augusta Ga.

Gordon A. Eve

Augusta

A. A. Eve

John


Mr Scott
Mr " Scott

Eve

Joseph A. Eve

Geo

John L. Pelot

Augusta

Augusta Georgia

Joseph A. Eve M.D. Prof of Obstetrics & Diseases of Women & Children, in the Medical College of Georgia

Copied

T. E. Deming
Eutaw Field, Dist
South Carolina

Fortuna

Sic Placit Deo

Amor vincit omnia; et nos cedamus amori.

Joseph

Joseph A. Eve
Augusta, Georgia

Augusta, Georgia

Jos A. Eve

Joseph A. Eve, M.D.
Augusta,
Geo.

J. A. Eve M. D.
Augusta
Georgia

J. A. Eve
Augusta
Georgia

Hamilton, R. Pierce

Hamilton R. Pierce
Augusta
Examinations Dempsé
on
A course of Anatomical
Lectures
By
Profs. Geo. M. Newton, M. D.
Augusta
1844.

Errata.

The word Lamina may be found in the following pages incorrectly written under the idea that it belonged to the Third declension.

The word Lateral may be found spelt with two tts if not corrected.

Other errors may be found, as for instance; some word or words many be omitted &c — owing to the great haste with which these pages have been written. We hope however no error of importance will be detected. They would have been removed if time had been given.

Division of Anatomy. Male Lower

Q. How is Anatomy divided?

A. Descriptive or Special & general.

Q. What is meant by Special Anatomy?

A. The exterior form of the organs, their magnitude, position, connections with adjacent parts & their texture or organization.

Q. What by general anatomy?

A. All the elementary tissues, of which fourteen are reckoned.

Q. What is the regional division of the skeleton? Male Drawer

A. Head, Trunk, Superior & inferior extremities. M. L. or. Male, Lower

Q. What kinds of matter are found in the composition of bone?

A. Animal & earthy.

Q. Can you deprive a bone of its animal matter and still retain its form and vice versa?

A. Yes, Sir.

Q. How many stages are there in the development of bone, & what are they?

A. Three: Mucous, Cartilaginous, & osseous.

Q. What begins to ossify first?

A. Clavicle, then the inferior maxilla

Q. What two structures enter into bone?

4.

Bones – their structure – Cranium

Q Compact & Cellular.

Q Into what may the compact be separated?

A Into Lamina. and these into Fibres. page 18

Q Are bones possessed of blood vessels, nerves & lymphatics?

A They are.

Q What is that membrane called which surrounds the bones?

A Periosteum. 16 N

+ Head, or Face & Cranium –

Q How is the head divided?

A Into Cranium & Face.

Q How many bones in the Cranium?

A Eight.

Q Name them?

A Occipital, Sphenoidal, Ethmoid, Frontal, 2 Parietal & 2 Temporal.

Q Name the symmetrical bones of the Cranium?

A Occipital, Sphenoidal, Ethmoid, & Frontal.

Occipital bone.

Q What is the figure of the occipital bone?
A. Quadrilateral, resembling a Trapezium; convex externally & concave internally.
Q What large hole is there in the lower portion of this bone?
A Foramen magnum occipitis.
Q. What is that part of the bone called which is in front of this hole?
A. The basilar or cuneiform process.
Q What cavity does it overhang?
A. The Larynx.
Q What rests in the excavation on the superior surface of this process.
A. Medulla Oblongata.
Q What bone joins this process anteriorly?
A Sphenoide bone.
Q With what do the condyles of this process articulate?
A. The first vertebra.
Q. What passes through the foramen magnum?
A. The spinal marrow, vertebral arteries & ocend. and the spinal accessory nerves.
Q Where is the occipital protuberance?
A On the external surface half way between the foramen and the upper angle of the bone.
Q. What extends from each side of this?

Occipital bone.

Q. The superior ~~linea~~ circular ridge.

Q. What is observed about one inch below?

A. The inferior semicircular ridge.

Q. What is observed just behind each condyle?

A. A fossa.

Q. What foramen in each fossa?

A. The posterior condyloid foramen.

Q. What foramen passes the condyle having its origin in front?

A. The anterior condyloid foramen.

Q. By what is each limb composing the cross, on the internal surface, marked?

A. A groove or fossa for a sinus

Q. There are four cavities formed by these ridges what do they contain?

A. The two superior, the lobes of Cerebrum, the inferior the lobes the Cerebellum

Q. With what bones does the occipital articulate?

A. Above with the parietal bones. laterally with the temporal bones. in front with the sphenoid bone.

Q. How many points of ossification for this bone?

A. Four.

Frontal Bone.

Q. What part of the walls of the cranium is formed by the frontal bone?
A. The whole anterior - a portion of the lateral inferior and superior.
Q. How is the front surface terminated on either side below?
A By the orbitar ridge
Q. What are the internal & external terminations of the ridge called?
A. Angular processes.
Q. What is there just above each of the orbitar process?
A. The superciliary or nasal protuberance.
Q. What is there on each side of the front of this bone?
A The frontal protuberance or bosses
Q. What part of this bone is the nose?
A. Orbitar Process.
Q. What is received in the opening between the orbitar Processes?
A. Ethmoid bone.
Q Where is the depression for containing the lacrymal gland?
A. At the exterior anterior part of the orbitar process
Q. What is that foramen or notch called

Frontal & Sphenoid bone
in the orbitar ridge?
A. Supra-orbitary foramen.
Q. Where are the frontal sinuses?
A. Beneath the nasal protuberances.
Q. Through what bone do they communicate with the nasal cavity?
A Ethmoid bone.
Q. Which what bones of the cranium is this united?
A. Parietal. Ethmoid & Sphenoid
Q Sphenoid Bone
Q To what has the sphenoid bone been compared?
A. A bat.
Q Where is it situated? Transversely in the middle of the base of the cranium.
Q. What are the processes arising from the upper anterior part of the bone called?
A. The apophyses of Ingrassias or little wings
Q With what bone does their anterior edge articulate?
A The frontal bone.
Q By what foramen is the base of each wing perforated?
A. The foramen opticum.
Q. What is that ridge of bone between the

Sphenoid

Foramina Opticum Called.

A. The Processus Olivaris

Q. What is the depression behind the ridge?

A. Sella Turcica.

Q. What process in the middle of the inferior face of the body of this bone?

A. Aggers process.

Q. With what does it articulate?

A. The Vomer.

Q. What processes project downwards from the lower part of the great wings?

A. Pterygoid. External & internal

Q. By what are they separated?

A. The Pterygoid Fossa.

Q. What process of this bone situated between the petrous & squamous portion of the Temporal bone?

A. Spinous process.

Q. What projects downwards from the Spinous?

A. The Styloid process.

Q. What foramen between the less & greater wings?

A. Foramen Lacerum Superior

Q. What foramen just below this?

A. Foramen Rotundum

Q. What behind the last?

Sphenoid & Parietal bones

A. Foramen Spinale. ovale

2 What bones does the sphenoid articulate with in front?

A. Vomer. frontal. Ethmoid. malar. & Parietal

2. With what laterally?

A. Temporally.

2. Behind?

A Occipital

2. How many points of ossification for this bone?

A Eight.

Parietal Bones

2. What part of the cranial wall do the parietal bones form?

A The superior & lateral

2 How divided for discription?

A. Two surfaces. 4 margins & angles

2. What rises about the middle of external surface?

A. Parietal protuberance.

2. What part is it that should not be breathing edge?

A The anterior inferior angle.

2. With what does it articulate?

A Its fellow. frontal. Sphenoid. Temporal & Occipital.

Ethmoid bone.

Q. Where is the Ethmoid bone situated?
A. Between the orbitar processes of the frontal.
Q. What is that vertical process on the superior face of cribiform plate called?
A. Crista Galli
Q. How is the bone divided?
A. A middle portion & 2 lateral masses.
Q. What foramen between the front of the Crista Galli & the os frontis?
A. Foramen Coecum.
Q. On each side of the Crista Galli there is a depression what occupies them?
A. The bulb of olfactory nerve
Q. What is the vertical plate below the cribiform called?
A. The nasal Plate. Lamella.
Q. What is the portion of this bone called which contributes to the formation of the orbit?
A. Os Planum.
Q. A part of what cavity does the internal face of the cellular portion form?
A. A part of the nostril.
Q. What is in the middle of this surface?
A. The superior meatus of the nose
Q. What forms the upper boundary of this meatus? The upper turbinated bone.

Temporal bone

Q. What the inferior?
A. The middle Turbinated bone.
Q. Is the inferior turbinated bone a part of the middle?
A It is not.

Temporal Bones

Q What part of the parietes of Cranium is formed by the Temporal bone?
A A part of the lateral and inferior
Q How is it divided?
A The circular anterior portion is called — squamous — behind is the mastoid — between these is the petrous.
Q What occupies that groove at the anterior inferior part of the internal surface of the squamous portion?
A The middle artery of the Dura Mater
Q What cavity is on the external surface at the anterior inferior part of this portion?
A. The Glenoid Cavity.
Q With what does it articulate?
A. The lower jaw
Q By what is the glenoid cavity in its outer margin formed?
A The zygomatic process.
Q Between what bones is the upper angle of

Temporal.

the mastoid portion received?
A. The Parietal & Occipital.
Q. What large process on this bone?
A. The Mastoid.
Q. What is that fissure called at the inner side of the base of this process?
A. Digastricus
Q. What occupies the fissure on the internal surface of this portion?
A. Lateral Sinus of the Brain.
Q. What foramen at the centre of the anterior surface?
A. The Meatus Pallopii.
Q. What nerve passes through it?
A. The Vidian.
Q. What large foramen on the posterior surface of the petrous portion?
A. Meatus Auditorius Internus
Q. What foramen at the base of the petrous. between the Mastoid & Zygomatic process?
A. The Meatus Auditorius Externus.
Q. What fissure between the squamous and petrous portion
A. Glenoid
Q. What fossa just within the styloid process? The Jugular fossa.

Q. What foramen immediately before the lower end of this fossa?
A. Carotic canal

Face.

Q. How many bones in the face?
A. 14.
Q. What bone forms the lower boundary of the face
A. Inferior maxillary bone.
Q. How is it divided?
A. Into a body and 2 branches or Rami
Q. By what is the upper edge formed?
A. The alveola processes & Cavities.
Q. What is there at the lower part of the symphysis?
A. The anterior mental Tubercle
Q. What foramen is there on the external surface bounding the chin?
A. Anterior mental or Maxillary foramen.
Q. What does it communicate with?
A. A large canal in this bone
Q. Where is the posterior mental Tubercle?
A. At the lower internal part of the symphysis
Q. What two processes terminate the rami of this bone?
A. Coronoid & Condyloid

Superior Maxillar

Q. What is the superior face called?
A. Orbitar process
Q. Where is the infra orbitar foramen?
A. Just below the middle of the lower margin of the orbit.
Q. What is that portion called which articulates with the malar bone?
A. The malar process.
Q. What process rises from the upper & inner side on this bone?
A. Nasal.
Q. By what is the under surface marked?
A. Alveolar processes.
Q. What process is within the circle of the Alveolar processes?
A. Palate Process.
Q. What does its superior surface form?
A. Floor of the nostril
Q. What foramen just behind the first alveolar process opening into the nostril?
A. The foramen Incisivum
Q. What large cavity on the inner face of this bone?
A. Antrum Hygmorianum.

Palate bones.

Q. How is the palate bone divided for description
A. Into a horizontal or palate; vertical or nasal; and orbitar plates.
Q What is the palate on the same line & continuous with?
A. The palate of the superior maxillary
Q. What part of the nostril does the nasal plate form?
A. The posterior external
Q. What process arises from the posterior inferior of this nasal plate?
A Pterygoid
Q. Does the orbitar plate form a large part of the orbit?
A No sir

Nasal Bones.

Q What is the figure of the nasal bones?
A Oblong.
Q. What is formed by them?
A A strong bridge or arch.
Q. With what do the articulate above?
A Os Frontis

Unguiform bones

Q. What small bones are placed between the nasal process of the maxillary & os planum?
A The unguiform bones.

Malar bone.

Q What part of the face is formed by the malar bone?

A The middle external.

Q How many faces or surfaces considered in this bone?

A One that contributes to the orbit, one in front which is convex, one concave behind; ~~two su~~ superior & two inferior margins

Q With what does the posterior superior margin articulate?

A. The Zygomatic Process of the Temporal bone

Q To what muscles does the posterior inferior margin give rise?

A Masseter

Q What are the angles of this bone called?

A. Superior orbitar or angular process. inferior orbitar or angular. the Zygomatic & maxillary processes.

Turbinated bones.

Q Where is the inferior spongy Turbinated bone

A. Inferior to the lateral ~~parts~~ of the nose.

Q How is the internal face?

A Convex.

Q What does the posterior in the superior part of the vomer receive?

A The azygos Process of Sphenoid bone.

Spinal Column

Q. What are the bones composing the Spinal Column called?
A. Vertebrae
Q How many true vertebrae?
A Twenty four.
Q How are they divided?
A 7 Cervical. 12 Dorsal. 5 Lumbar.
Q What is the figure of S. ~~Column~~?
A Triangular
Q. Is it filled by the Spinal marrow?
A. Not completely.
Q. A vertebra is divided into portions for description what are they?
A A body & an annular portion.
Q What is the first vertebra called?
A The Atlas
Q. What is the particular about it?
A It has no body or spinous process. the transverse process is long. the spinal cavity large. it presents two surfaces to articulate with the condyles of the occiput, - has a surface on the anterior ridge to articulate with the odontoid process of the second vertebra
Q By what is the second known?
A Processus dentatus.
Q Ligament is it confined?

Spl. Column & Thorax

A Transverse Ligament.

Q What peculiarity have 11th & 12th Dorsal?

A They have each a complete articular surface for the corresponding ribs

Q. How many points of ossification for each vertebra?

A. Three. 1 for the body. 1 for each annular part

Q. How would you know a lumbar vertebra

A They larger than the others. the zygophysis at the margin of the fossa are larger and more elevated. the transverse processes stand out at right angle. & the spinous horizontal see page 135

Thorax.

Q How is the Thorax formed?

A. By the Dorsal vertebrae behind, the Sternum in front. & by the ribs & their cartilages

Q. What is the figure of the thorax?

A Conoidal.

Q How are the ribs divided?

A Into True and False.

Q How many true ribs are there?

A 7.

Q How many false?

A 5.

Q How do they run commencing at their

Ribs.

posterior extremity
A. Downward & Forward.
Q. Which rib is nearest horizontal?
A. First
Q. How is each rib divided for description?
A. An external & internal surface, an upper & lower margin. & a vertebral & sternal extremity
Q. How are the surfaces?
A. External convex. internal concave
Q. How are the margins?
A. Upper rough. lower & sharp
Q. What is noticed on a rib not far from its vertebral extremity?
A. A considerable curvature called the posterior angle of the rib.
Q. Where is the intercostal groove or groove?
A. Just within and above the lower margin
Q. How would distinguish the first rib?
A. It is more circular, its head has but one articular surface. it is flat above & below. its margins are internal & external. it has no intercostal groove.
Q. What are the two last ribs called?
A. Floating.
Q. Is the sternum parallel to the S. Column?
A. It is not.

Sternum

Q. Which surface is convex?
A. Anterior.
Q. By how many pieces is it composed?
A. 3.
Q. What is the notch on the superior extremity called?
A. Semilunar notch or Fourchette.
Q. What is the inferior portion of the bone called?
A. Ensiform or Xyphoid Cartilage.
Q. Is the small extremity of this bone always pointed?
A. Sometimes it is bifurcated.
Q. What articulates with the margins of this bone?
A. The Cartilages of the ribs.
Q. What bone at the superior extremity?
A. Clavicle.
Q. What is the length of the sternum?
A. From 5 to 7½ inches.
Q. Is it shorter in the male or female?
A. In the female.
Q. Of texture of bone is the sternum principally?
A. Spongy.

Os Innominatum

Q. How many primitive points of ossification and how Secondary for this bone?

A. 3. primitives; one for Ilium, one for Ischium, one for pubis. The Secondary are 1. for Crest of the Ilium, 1 inf. Spinous process, 1. Sup. portion of the acetabulum. 1. Tuberosity of the Ischium. 1. Symphesis pubis. 5.

Q. Which is the largest bone of the innominatum

A. The Ilium.

Q. How many processes on this bone?

A. 4. 2 anterior & 2 posterior spinous processes.

Q. Is its dorsum concave?

A. Yes Sir.

Q. What is the internal face called?

A. Costa or Venter.

Q. Which is the smallest bone of the innominatum

A. Pubis

Q. How is it divided?

A. A horizontal portion the body, & a descending portion.

Q. How is the triangular concavity on the superior surface of the horizontal portion bounded?

A: On one side linea ilio-pectinea, on the other by ridge which terminates in the anterior superior part of the acetabulum.

Os Innominatum

Q. What is that part of the pubis called when it joins its fellow?
A. Symphysis (of the) pubis.
Q. What part of the Innominatum is formed by the Ischium?
A. The posterior inferior.
Q. What part joins the pubis?
A. Ramus or Crus.
Q. How is the sacro-sciatic notch formed?
A. The posterior part by the sacrum and the anterior by Ischium.
Q. How much of the acetabulum does bone form?
A. Pubis 1/5. Ilium 2/5. Ischium 2/5.
Q. What large foramen in the front part of the Innominatum?
A. Thyroid foramen. or Foramen Ovale.
Q. Describe the sacrum & os coccygis.
A. The sacrum wedged shape bone between the Innominata. At the inferior of which is the coccygis.

Clavical & Scapula

Q. How is the upper extremity divided?
A. Shoulder. Arm. Fore-Arm. Hand.
Q. What shape is it?
A. Like the cylindrical. Flattened externally and internally its is triangular.
Q. What curvature do the thirds possess?
A. Convex anteriorly. Concave posteriorly.
Q. What curvature on humoral third?
A. Convex posteriorly. Concave anteriorly.
Q. What difference in this bone in the male and female?
A. Longer, smaller and ~~longer~~ less curved in the female.
Q. Is there any difference in the right & left of the same subject?
A. Right larger and more curved.
Q. On what does its rest at the distance of 1/3 its length from the Sternum?
A. First Rib.

Q

Scapula

Q. What is its figure?
A. Triangular.
Q. What is the posterior face or surface called?
A. Dorsum.
Q. What the Anterior?
A. Costa or Venter.

Scapula & Humerus

Q. What is that ridge on the dorsum called?
A. The spinous process.
Q. What cavity above the spinous process?
A. Supra-spinata Fossa.
Q. What below?
A. Infra spinata Fossa.
Q. In what does the spinous process terminate?
A. The acromion process
Q. What cavity does it overlook?
A Glenoid Cavity.
Q. What are the margins of the Scapula?
A. One Superior. one external. one posterior which is internal
Q. What Angles has it?
A. the superior, the Inferior & one Exterior or interior
Q. What process arises from the curve of the Glenoid Cavity?
A. The Coracoid process.

Humerus.

Q. What is general shape of the os humeri?
A. Cylindrical
Q How much of sphere does the head of the os humeri represent?
A. One thirds
Q. What does the bicipital groove separate in

Humerus & Ulna

this bone?

A. The greater & less Tuberosity

Q. With what does it unite at its lower extremity

A. Radius and Ulna

Q. What cavity above the ulnar articulation anteriorly

A. The less sigmoid

Q. Where is the greater sigmoid cavity?

A. In a corresponding place behind

Q. What does it receive when the arm is extended

A. Olecranon process of the Ulna

Q. On what side of the forearm is the ulna?

A. On the side with little finger

Q. Which is largest extremity of the Ulna?

A. Superior

Q. What process a little below and in front of the Olecranon?

A. Coronoid

Q. What cavity separates them?

A. The greater sigmoid

Q. Where is the lesser sigmoid cavity?

A. On the radial surface of the coronoid process

Q. What process on the inferior extremity of the bone on the side of the little finger?

A. The Styloid process

Q. Which is the longest the Ulna & Radius?

A. Ulna.

Radius & Carpus.

Q. Which is the largest extremity of the Radius?
A. The carpal.
Q. Where is its head?
A. The superior extremity.
Q. What is the prominence immediately below the neck called?
A. Bicipital or Tubercle of the Radius
Q. With what of the Carpus does the Radius articulate?
A. Os Lunaris & Os Scaphoides

Carpus.

Q. How many bones in the Carpus?
A. 8. Scaphoides, Lunaris, Cuneiform, Pisiform, Trapezium, Trapezoid, os magnum, unciform
Q. How are these bones arranged?
A. In 2 rows
Q. What bones are in the first?
A. Lunaris, Scaphoides, Cuneiform, & Pisiform
Q. What is it that can be easily felt at the ulnar extremity of the wrist?
A. Pisiform bone.
Q. Which is the largest bone of the Carpus?
A. Os magnum.
Q. Is the surface articulating with the Ulna and Radius convex or concave?

Carpus & Os Femoris

A. Convex.

Q. By what bones of the carpus is the oblong convexhead principally formed?

A. Scaphoides Lunaris and slightly by the Cuneiform.

Q. How would you know the metacarpal bone of the thumb?

A. It is shortest & thickest of any.

Q. How many phalanges has each finger?

A. Three. skip

Inferior Extremity

Q. What bones compose the Inferior Extremity?

A. Os Femoris. Patella, Tibia & Fibula & those of the foot

Q. What 3 eminences at the superior portion of the os femoris?

A. The head. & Trochanter major & minor

Q. What at the inferior?

A. External & Internal Condyles.

Q. Which is the longest?

A. The internal

Q. Which is the smallest part of the body of the bone

A. About the middle

Q. Where is Linea aspera?

A. On the posterior surface

Q. What is the name of the fossa at the root of the trocanter Major?

A. Digital fossa — Rep. 125 — skip

Tibia and Fibula

Q. Which is the internal bone of the leg?
A. Tibia
Q. What portion of it is smallest?
A. One third from the inferior extremity
Q. Where is the spinous process of the tibia?
A. Between the 2 cavities which articulate with the condyles of the os Femoris
Q. What process at the inferior extremity of the Tibia?
A. Internal Malleolus
Q. With what bone of the Tarsus does it articulate
A. The Astragalus
Q. For what is that concavity on the lower part of the Tibia?
A. For articulation with the Fibula.
Q. How many surfaces & ridges in the length of the Tibia?
A. 3 of each.
Q. Which is the longest the Tibia or Fibula?
A. Tibia

Fibula

Q. What is the inferior portion of this bone called?
A. External Malleolus
Q. How many surfaces and ridges on it?
A. 3 of each.

Patella & Foot

Q. Where is the Patella situated?
A. At the fore part of the knee joint
Q. What is observed on the posterior surface?
A. A ridge from the superior to the inferior margin
Q. Which surface is convex?
A. The external

Foot

Q. How is the foot divided?
A. into Tarsus. Metatarsus. & Toes or Phalanges
Q. What bones compose the Tarsus?
A. Os calcis, Astragalus, Navicular, Cuboides & 3 Cuneiform bones
Q. Which is the largest
A. Os Calcis
Q. Which next in size, & where situated?
A. Astragalus. placed on the os calcis between it & the bone of the leg.
Q. Where is the Navicular?
A. At the internal side of the Tarsus. between the astragalus & Cuneiforms.
Q. How many Metatarsal bones?
A. 5.
Q. How would you distinguish the first?
A. It is larger & shorter.
Q. How many phalanges to each toe?
A. 3. except the big toe - it has 2.

Muscular System

Abdominal muscles & integuments

Q. What forms the external surface of the abdomen?
A. Thin extensible Skin
Q. What is the layer next. and of what composed?
A. Fascia superficialis abdominis, composed of condensed cellular tissue with some adipose matter
Q. What name is given to that portion situated along the pubis?
A. Ligamentum Suspensorium
Q. How many pairs of ~~of~~ muscles compose the external anterior & lateral parietes of the abdomen?
A. 5.
Q. Which is the most external?
A. External oblique.
Q. Give the origin & Insertion of Ext. Obliqu.
A. It rises by 8 tendinous & muscular digitations from the 8 inferior ribs at a little distance from their cartilage. the first head covered by the pectoralis major. the 5 upper digitate with the serratus major anticus. the 3 lower with the latissimus dorsi. the fibres pass downwards & inwards & terminate in a b[illegible]thin tendon covering the lower part of the abdomen. Inserted into the whole length of the linea alba. the anterior half of the crest of the ileum. the spine & symphysis of the Pubis.

External & Internal Oblique

Q. How is the Lina Alba formed?
A. By the Tendons of the three broad muscles of the abdomen
Q. What are those lines called on either side of the Lina alba two or three inches from it?
A. Linear Semilunaris
Q. What is that part of the tendon which joins the Pubis called?
A. Poupparts Ligament
Q. What hole in this Ligament?
A. The external abdominal ring
Q. What passes out of it?
A. The Spermatic cord of the male, & the round ligaments of the womb of in the female.
Q. Give the insertion of the tendon forming its upper boundary?
A. Into the pubis of the same and opposite side
Q. What is that tendon called?
A. Internal Column
Q. Give the insertion of the external Column?
A. Into the spine & Crista of the Pubis
Q. Which part is called Gimbernat's ligament
A. That part inserted in the crista of the Pubis.

Obliquus Internus

Q. What muscle is next to the last?
A. Obliquus Internus

Rectus & Cremaster

Q. Give its origin and insertion?

A. It rises by the fascia Lumborum from the spinous processes of the three inferior lumbar vertebra from all those of the sacrum. From the crista of the ileum, and upper part of Poupart's ligament, the fibres run upward & inwards. Inserted into the cartilage of the 6 lower ribs. the ensiform cartilage & Linea Alba. +

Q. Give the origin & insertion of the Transversalis

A. It arises from the fascia Lumborum. 2 Inf. dorsal & 4 Lumbar vertebrae, the spine of the ileum external half of Poupart's ligament. the inferior surface of the cartilage of the 6th & 7th ribs. The fibres run transversely. Inserted into the ensiform cartilage. & Linea Alba.

Q. Give the origin & insertion of the Rectus

A. It rises from the symphysis & upper margin of the body of the Pubis, the fibres pass upward & are inserted into the cartilage ensiformis & the cartilages of 5th. 6. 7 ribs

Q. How is the Cremaster ~~disposed~~ formed?

A. The testicle in descending ~~through~~ passes beneath ~~that~~ edge of the Transversalis & internal obliquus which extends from Poupart's ligament to the crest & spine of the Pubis & takes a

Fascia v. Pyramidalis

fasciculus of those fibres which envelope it & thus constitute the Cremaster muscle.

Q. What is the length of the inguinal or abdominal ~~ring~~ canal?

A. 1½ inche.

Q. Where is the fascia Transversalis abdominis?

A. Between the Transverse muscle & Peritoneum

Q. What perforation in it?

A. The internal abdominal ring.

Q. What is that stratum between the Fascia transversalis & Peritoneum?

A. Fascia Propria

Q. What forms the innermost stratum of the abdominal Parietes?

A. Peritoneum. which is a serous membrane

Q. What Coverings has an oblique hernia?

A. 1st Skin. 2d. Fascia superficialis. 3d. Cremaster muscle. 4d ~~Oblique Ext~~. Inter Columna fascia 5 Fascia Transversalis. & 6. Peritoneum.

Q. Where is the Pyramidalis muscle?

A. On the lower part of the Rectus

Q. Give its origin & Insertion?

A. Rises from the symphysis & inner part of the spine of the pubis in front of the Rectus. Inserted into the Linea Alba

Pectoralis major & minor. Trapezius

Q. Give the origin & insertion of the Pectoralis major?

A. It arises from the anterior face of the Sternum. from the cartilages of the ribs, including the second & sixth. from the the tendon of the Ext. Obliquus. from 2/3 of the Clavicle internally; Inserted into the margin, anterior, of the bicipital groove of the os humeri.

Q. What motion does this muscle give the arm?

A. It is an abductor, Rotator, depressor, and elevator of the arm.

Q. What are its extraordinary motion or action?

A. It may act from the Os humeri and elevate the ribs & Sternum in Respiration

Q. What small muscle lies under this?

A. Pectoralis minor

Give its origin and Insertion?

A. It arises from the cartilage of the 3d. 4. 5th ribs Inserted into Coracoid process of the scapula

Q. What is its action?

A. Draws the Shoulder ~~and~~ downwards & inwards. it may assist in respiration

Q. Where is the Trapezius?

A. Immediately under the skin covering the back part of the neck & Thorax.

Latissimus Dorsi & Serratus post. inf.

Q. Give its origin & insertion?

A. It rises from the occipital protuberance. superior semicircular ridge. & spinous process of all the vertebra of the neck & back. the superior fibres run obliquely downwards. the middle transversely; inferior upwards inserted into the external 1/3 of the clavicle. acromion process, & spine of the scapula.

Q. Give the origin and insertion of Latissimus Dorsi

A. It rises from 7 inferior spinous process of the back. all those of the sacrum, & loins. the posterior part of the spine of the Ilium & 4 inferior ribs Inserted into the bicipital groove of the humerus

Q. What is its action?

A. It draws the humerus downwards and backwards

Q. Give the the origin and insertion of the Serratus posticus inferior?

A. It rises from 2 inferior Dor. ab. 3 superior lumbar vertebrae, inserted into 4 inferior ribs

Q. To what muscle is an antagonist?

A. The Serratus Superior Posticus.

Q. How is the Rhomboideus muscle divided?

A. Rhomboideus major. or inferior portion & Rhomboideus minor or superior portion.

Rhomboideus, Serratus post. Sup. Levator Scapulæ

Give the origin and insertion of each?

A. Minor rises from 3 spinous processes of the neck. the major from the 7th of the neck & 4 of the back, they are inserted into together into the base of the Scapula. It draws the Scapula up & back—

2. Give the origin of the Serratus post. superior?

A. It rises from the 3 inf. spinous processes of the neck. and of the 2 sup: of the back; inserted into the 2. 3. 4 & 5th ribs. it draws the ribs up & assists in inspiration

2. Where is the Levator Scapulae?

A. Anterior to the Trapezius. with its lower end just above the Rhomboideus.

2. Give its origin and insertion?

A. It rises by 4 tendons from 4 sup. transverse processes of the neck. inserted into the base of the Scapula.

2. Where is the Splenius muscle?

A. Beneath the Trapezius.

2. Give its origin & insertion?

A. It rises from 5 inf spinous process of the cervical & 4 sup. dorsal vertebræ. inserted into the mastoid process & adjoining part of the Occipital

Sacro Lumbalis & Longissimus Dorsi.

Q. It detaches 2 prolongations where are they inserted?

A. Into the first and 2 vertebrae

Q. What is that part called?

A. The Splenius Colli.

Q. What is its action?

A. Draws the head back.

Q. Where is the Sacro-Lumbalis & Longissimus dorsi?

A. Between the spinous processes of the vertebrae and angles of the ribs.

Q. Which is nearest the spine?

A. Longissimus Dorsi

Q. Its inner origin & insertion?

A. They have a common origin from the external margin and spine of the sacrum. Spinous and transverse processes of the Lumbar vertebrae & spine of the Ilium. Longissimus dorsi is inserted into the transverse processes of all the dorsal vertebrae except the first & into the under edge of all the ribs but the 2 lower. The Sacro Lumbalis is inserted into all the ribs at their angles.

Q. What are those slips called coming from the Sacro Lumbalis & attached to the 8 lower ribs?

A. Musculi accessorii to Sacro Lumbalis

Muscles on & near the Neck.

Q What is the action of these muscles?
A. To keep the spine erect and to down the ribs.

Q. Give the origin and insertion of Cervicalis descendens?
A It arises from the upper margin of 4 Sup. ribs Inserted into the transverse processes of the 4. 5 & 6 cervical vertebrae.

Q Where are the Transversalis Cervicis?
A On the inner side of the last.
Q. Where is the Trachelo Mastoideus?
A. On the inner side of the Transversalis Cervicis
Q Give its origin and insertion?
A. It arises from 5 inf. transverse processes of the cervical and 4 sup of the dorsal vertebra inserted into the mastoid process.
Q G
Q. Give the origin & insertion of the Complexus?
A. It rises from 7 sup. Dorsal. 4 inf Cervical vertebra by their transverse processes. Inserted into the Occiput between the semilunar ridges.

Q Give the origin and insertion of the Semispinalis Cervicis?
A It arises from the transverse processes of the 6 superior dorsal vertebra

Semi-Spinalis Dorsi, Multifidis Spinis; &c.
~~of the Dorsal vertebra~~. Inserted into the
Spinous Processes of the 5 middle Cervical Vert.

Q Give the origin & insertion of the Semi-Spinalis
Dorsi?
A. It rises from the transverse Process of the 7.
8.9.10.11. Dorsal vertebrae. Inserted into the Spine
of the 2 inf Cervical & 5 Sup dorsal vertebrae.

Q Give the origin & Insertion of Multifidis Spinis
A. Rises from the Spinous processes of the sacrum
the Spine of the Ileum. the transverse & oblique
processes of all the vertebrae except the 3 superior
Inserted into the Spinous of all except
3 Superior

Q Give origin & insertion of Levatores Costarum?
A. Rises from the last cervical and eleven
superior dorsal vertebrae and inserted into
each rib below.
Q What is its action?
A. To elevate the ribs

Q Where are the inter Spinalis?
A Between the Spinous Process of Contiguous
vertebrae.

Rect. Post. Capi. Maj. min. Obliquus

Q. Where are the Intertransversales?

A. Between the transverse processes of contiguous vertebrae.

Q. What is their action?

A. To draw together the transverse processes and bend the spinal column.

Rectus Posticus Capitis Major.

Q. Give its origin & insertion?

A. It arises from the spinous process of the dentata inserted into the semicircular ridge of the occiput at the inner end.

Q. Give the origin & insertion of the Rectus Capitis Posticus Minor?

A. It rises from the tubercle of the Atlas inserted into the inferior semicircular ridge of the occipital bone.

Obliquous Capitis inferior

Q. Give its origin & insertion?

A. Rises from the side of the spinous process of the dentata. Inserted into the transverse process of the Atlas.

Muscles of the Chest.

Q. Give the origin & insertion of Subclavian?

A. Rises from the cartilage of the 1st rib. Inserted into the inferior face of the clavicle from the Sternum to the coronoid ligament

Q. What does it separate from the clavicle?

A. The axillary vessels & brachial plexus of nerves

Q. Give the origin & insertion of Serratus Magnus Anticus

A. It rises from the 9 superior ribs, the five lower digitations are connected with the obliquus Extern. into the base and angle of the Scapula

Inter Costal Muscles.

Q. How are they divided?

A. External & Internal.

Q. Give the origin & insert. of the External?

A. Rises from the inferior edge of the ribs ~~begin~~ at the Sternum & ending at the angle of the ribs, insert into the superior margin of the Ribs below.

Q. Give the origin & insert. of the Internal?

A. Rises from the superior margin of each rib commencing at the Sternum and ending at the angle of the ribs - insert into the superior edge of the rib below.

Q. Give the origin & insert. of the External?

A. Rises from the under surface of the transverse processes and inferior edge of each rib; insert into the rib below.

Triangularis Sterni: Deltoid: Supra & Infra Spinata Scap.

Triangularis Sterni

Q Give its origin & Insert?

A. Rises from the margin of the Ensiform Cartilage and Sternum & inst into 4th 5th 6th 7th 8th & 9th ribs.

Muscles of The Shoulder

Q How many are there?

A Six.

Q Give the origin & Insertion of the deltoid?

A Rises from the spine of the Scapula the acromion process & the External third of the clavicle inst. into a triangular rough space or line on the outter side of the os Humeri near its middle third.

Q What is its action?

A. Raises the humerus. By its anterior fibres brings it forward, by the posterior carries it backward.

Supra Spinatus Scapulae.

Q Give its origin & Insertion

A It rises from the Concave surface of the spine of the Scapula and from the superior border of that bone. inst. into greater tuberosity of the humerus.

Infra Spinatus Scapulae

Give its origin and insertion?

A Rises from the two internal thirds of the Infra Spinata Fossa. Inst. into greater tuberosity of the Humerus

Teres Minor & Major. Subscapularis. Biceps. Coracobrachialis.

Q. Give the origin and insert. of of Teres Minor?

A. Rises from the inferior angle of the Scapula and the inferior border of that bone. Inst into the lower back part of the tuberosity of the Humerus.

Q. Give the origin & Inst of Teres Major?

A. Rises from the inferior border of Infra Spinata fossa & lower third of the base of the Scapula. Inst into inner side of bicipital Groove

Q. Give the origin & Inst of the Subscapularis?

A. Rises from the base superior & inferior Costa & Costal surface of the Scapula; Inst into the Cavitas of the joint & small tuberosity of the Humerus.

Muscles of the Arm.

Q. Give the origin and inst of the Biceps Flexor Cubiti?

A. Rises by its long head from the superior part of the glenoid Cavity. by its short head from Coracoid Process of the Scapula. Inst into the tubercle at the upper end of the Radius by a common tendon

Q. What is its action ~~[illegible]~~?

A. Bends the forearm upon the arm and arm upon the Shoulder.

Q. Give the Origin and Inst of the Coracobrachialis?

A. Rises the Coracoid process. Inst into

Brachialis Internus, Triceps Extensor Cubi. Pronator R. Teres. &c
rough ridge and middle inner part of the humerus.

Q. Give the origin & Insert of the Brachialis Internus?

A. Rises by a bifurcated fleshy origin from the middle front face of the head of the humerus Inserts into the coronoid process of the ulna

Q. Give the origin of the Triceps Extensor Cubiti

A. Rises by 3 heads - long one from the inferior edge of the Scapula. Short one the ridge on the outer back part of the humerus. The third from the inner side of the humerus Inserts into the olecranon process & ridge leading from it on the Radial side.

Q. Give the origin of the Pronator Radii Teres?

A. Rises from the internal condyle of the Humerus & coronoid process of the ulna. Inserts into the exterior back of the Radius -

Q. Give the origin and insertion of the Flexor Carpi Radialis?

A. Rises from the internal condyle of the humerus. upper part of the ulna. and inter-osseous ligament. Inserts into the base of the metacarpal bone of fore finger

Q. What is its action?

A. Bends the hand

Q. Give the origin and insertion of the Palmaris longus?

Flexor Muscles of Arm &c

A. Rises from the internal condyle of os humeri & inter-muscular ligament. Inst. into the anterior portion of the annular ligament of the wrist.

Q. Give origin & insertion of Flexor Carpi Ulnaris?

A. Rises from the internal condyle of the os humeri, the Olecranon and ridge of the ulna. Inst. into the Pisiformis?

Q. Give the origin & inst. of the Flexor Digitorum Sublimis Perforatus?

A. Rises from the internal condyle of the humerus, coronoid process of the ulna & tubercle of the radius & terminates in 4 tendons which are perforated by the tendons of Flexor digitorum profundus perforans & are inserted into the second phalanx of each finger.

Q. Give the origin & inst. of Flexor digitorum profundus perforans?

A. Rises between the coronoid & Olecranon, Interosseous ligament. Lower 2/3 of the ulna. Inst into the 3 phalanx by 4 tendons.

Q. Give the origin & insertion of Flexor longus Pollicis manus.

A. Rises from the Rad. below its tubercle. from middle ½ of the front of the bone & interosseous ligament inserted into the base of the second phalanx of the thumb.

Pronators. Supinators & Flexor Ulnaris

Q. Give the origin & insert of Pronator Quadratus?

A. Rises from the inner surface of the ulna. Inst. into the corresponding surface of the Radius.

Q. Give its action?

A. Rotates the Rad. inward

Q. Give the origin and insertion of Supinator Radii longus

A. Rises from the ridge on the humerus leading to the external Condyle. Inserted into the Styloid process

Q. Give the origin & Insertion of Extensor Carpi Radialis longior?

A. Rises from the ridge leading to the Ext Condyle of the humerus. Inserted into the base of the meta carpal bone of the fore finger.

Q. Give the origin & Insertion of the extensor Carpi Radialis Brevior?

A. Rises from the ext Condyle of the humerus & upper part of the ulna. Inst into the meta carpal bone of the middle finger

Q. Give the origin & Inst of the Extensor digitorum Communis?

A. Rises from the Ext Condyle of the humerus & inter ossious ligament. Inst into the second Phalanx & distinct tendons into third.

Give the origin & Inst of the Flexor Carpi Ulnaris?

A. Rises from the Ext Condyle of humerus & internal lateral ligament. Inst the base of the M. Car bone of the little finger

Muscles of the Forearm

Q. Give the origin and insertion of the Indicator

A. Rises from the back part of the ulna commencing near its middle and interosseous ligament - Inst with the tendon of the extensor communis & into the back part of the forefinger

Q. What is its action?

A. It extends the forefinger.

Q. Give the origin & insertion of the extensor ossis Metacarpi pollicis manus?

A. Rises from the posterior part of the ulna below the anconeus from the interosseous ligament & the back part of the radius below the inst. of the pronator brevis. Inst. into the base of the metacarpal bone of the thumb & external side of the trapezium.

Q. Give the origin & insertion of the Extensor minor Pollicis Manus

A. Rises from the back part of the ulna below its middle, inst into the first phalanx of the thumb.

Q. Give the origin & insertion of the Extensor major pollicis manus?

A. Rises from posterior part of the ulna above its middle, the interosseous ligament

Muscles of the Hand

& the back part of the Radius, & inserted into the second Phalanx of the thumb.

Q. Give the origin & insertion of the anconeus?
A. Rises from the external Condyle of the Humerus inserted into the ridge of the external Post-Part of the ulna — It extends the forearm.

Q. Give the origin & Insertion of the Palmaris Brevis?
A. Rises from the anterior Part of the annular ligament of the wrist & inner side of the Palmar aponeurosis Inst into the skin & fat of the inner margin of the hand

How many Lumbricales Muscles are there?
A. Four Small muscles

Q. Give the origin and insertion of the abductor minimi digiti manus?
A. Rises from the protuberance of the os pisiforme & Contiguous Part of the annular Ligament. Inst into the first Phalanx of the little finger.

Q. Give the origin & Insertion of Flexor brevis minimi digiti manus

Muscles of the Hand

A. Rises from the unciforme bone & annular Ligament Inst. into the first Phalanx of the little finger.

Q. Give the origin & Inst of the abductor metacarpi minimi digiti manus?

A. Rises from the os unciforme & annular ligament. Inst into the whole of the inner part of the metacarpal bone of the little finger

Q. Give the origin & Inst. of the abductor Pollicis Manus?

A. Rises from the projecting ends of the Trapezium. os Scaphoides and annular Ligament. Insertd. into the outer side of the base of the Phalanx (first) of the thumb

Q. Give the origin & Insertion of the Opponens.

A. Rises from os Trapezium and annular Ligament. Inst into the radial edge of the metacarpal bone of the thumb.

1

Q. Give the origin & Inst of the Flexor Brevis Pollicis manus?

A. It is divided by the Tendon of the Flexor Pollicis longus, into 2 Heads; first rises from the Trapezium. Trapezoides and

Muscles of the Hand

annular Ligament. Inst into the outer bone
annoid bone Second rises from os magnum, unci
forme & base of the metacarpal bone of the middle
finger Inst. into the internal Sesamoid bone

2 Give and insertion of the adductor Pollicis
manus?
A. Rises from the ulna edge of the metacarpal
bone of the middle finger Inst. into the inner
side of the first phalanx of the thumb

3 Give the origin and insertion of the abductor
Indicis manus?
A. Rises from the trapezium ~~and side~~ the ulna
edge of the metacarpal bone of the thumb

Q How many Interosseous Muscles?
A. Seven: four on the palm —

Omo Hyd

Platisma. Myo. Ster. Cleid. Mastoid &c.

Q. Give the origin & Insertion of the Platisma myoides?

A. Rises from the condensed cellular membrane just below & nearly whole length of the Clavicle Inst into the integuments of the lower jaw

Q. What vein runs near its middle and in the direction of its fibres?

A. External Jugular vein

Q. Give the origin & Inst. of Sterno Cleido. Mastoideus?

A. Rises by two heads, by one from the upper end of the Sternum, by the other from the Sternal end of the Clavicle. Inst into the mastoid Process & Semicircular Ridge.

Q. What is there very important on the inner edge of this Muscle?

A. Primitive Carotid Artery & Pneumogastric nerve.

Q. Give the origin & Inst of the Omo Hyoides muscle?

A. Rises from the Superior margin of the Scapula. Inst into os Hyoides

Sterno Hyoid & Thyro: Hyreo Thyro Digas.

Of what does this muscle consist?

A Two bellies connected by a tendon which lies under the Sterno Cleido Mastoideus.

Q Give the origin & Insertion of Sterno Hyoideus.

A It rises from the aspera or uneated surface of the Cartilage of first rib & Sternum. Insts. into the base of the hyoid bone.

Give the origin and insertion of the Sterno Thyroidy

A Rises from the internal surface of the Cartilage of the first rib, and Sternum. Insts. into the Thyroid Cartilage.

Give the origin and insertion of the Hyro Thyroidy

A. Rises from the Thyroid Cartilage and Inst. into the base and Cornu of the os Hyoides

Give the origin & Insertion of the Digastric

A. Rises from a little fossa posterior to the base mastoid process of the Temporal bone. composed into a tendon which passes through the Stylo Hyoideus and is fixed to the base of the os hyoides

Give the origin & Insertion Stylo Hyoides

A Rises from the inferior surface of the inferior

Genio & Stylo Hyoid = Stylo-Glossus & Pharyngeus
Maxilla. the fibres converge and are inserted
into the base and cornua of the Hyoid bone

Give the origin & Insertion of the Genio Hyd—
A. Rises from the posterior tubercle of the lower
Jaw and is inserted into the base & part
of the cornu of the os Hyoides

Give the origin & Insertion of the stylo-
Hyoideus?
A. Rises from the Styloid Process of the Tem-
poral bone. is perforated by the digastricus
Inserted at the junction of the base & cornu
of the os hyoid

Give the origin & Insertion of Stylo glossus?
A. Rises from the Styloid process of the Tempo-
ral bone and is inserted into the side of
the root of the tongue. forming a part of
its structure.

Give the origin & Insertion of the Stylo Pharyngeus
A. Rises from the Styloid process of the Tem-
poral bone, Inst. into the Thyroid Cartilage
at the posterior part and into the Pharynx

Stylo & Genio Glossus = Scalenus Ant. & Post.

Give the origin & Insertion of the Stylo Glossus?
A. Rises from the cornu of the os hyoides & Inserts into the base extending toward the tip of the tongue

Give the origin & Insertion of the genio Glossus
A Rises from the posterior mental tubercle & Inserts into the base of the ~~tong~~ os Hyoides & the whole length of the tongue.

Give the origin and insertion of the Scalenus Anticus?
A Rises from the transverse processes of the 4 5 & 6 cervical vertebrae; inserted into upper surface of the first rib at its middle.
What large vein in front of this muscle?
A The Subclavian vein
What large blood vessel passes between this muscle and the Scalenus Posticus?
A Subclavian Artery.

Give the origin & insertion of the Scalenus Posticus
A Rises from the transverse processes of the cervical vertebrae. Inserts into inferior margin of the first & second rib by 2 Slips

Give the origin & Insertion of Longus Colli
A. Rises from the bodies of the 3 Superior

Rect: Capit: Lat:- Tensor Vag Fem:- Sartorius &c

dorsal vertibrae & from the transverse Processes of the 3.4.5 & 6 cervical vertibrae inst into the cuniform process of the os occipitis.

Give the origin & insertion of the Rectus Capitis Lateralis

A. Rises from the front part of the transverse process of the Atlas. inst into the ridge leading from the Condyle of the occipital to the mastoid process

Give the origin and insertion of the Tensor vaginæ Femoris?

A Rises from the Anterior Superior Spinous process of the Ileum Inserted into a fascia of the thigh. see page 215

Give the origin & insertion of the Sartorius

A. Rises from the Anterior Superior Spinous process of the Ileum. runs obliquely downwards inwards & is inserted into the inner side of Tibia near its tubercle page 215.

Give the origin insertion and situation of the Rectus Femoris.

A It is situated immediately in front of the

Vastus Ex. & In. Cruralis. Pectineus & thigh – Rises from the ant. & upper Spinous process of the Ilium * – inst. into the upper part of the Patella. page 215

* & upper lip of the acetabulum

Give the origin and insertion of the vastus Exterus?

A Rises from the anterior surface of the Trochanter major & linea aspera – Inst. into the external margin of the Patella. + page 216

Give the origin & Insertion of the Vastus Interus?

A. Rises from the anterior part of the Trochanter minor & linea aspera. Inserted into the upper inner edge of the Patella page 216.

Give the origin & insertion of the Cruralis?

A Rises from the fore part of the os Femoris almost to its lower extremity. Inserted into the Patella. see 216

Give the origin & Insertion of the Pectineus?

A. Rises from the brim of the Pelvis & Inserted into the upper third of the linea aspera

see 217

Give the origin and insertion of the adduc

Adductor Longus. Brevis. Magnus. Glutæus Longus.

A. Rises from ~~upper & inner part~~ of the pubes, & Inst. into the middle third of the Linea aspera

See 217

Give the origin & insertion of the adductor Brevis

A. Rises from the outer part of the pubes, Inst. into the Linea Aspera

See 215

Give the origin and insertion of the adductor Magnus?

A. Rises from the Posterior surface and Ramus of the pubes, from the Ramus and external border of the Ischium, Inst. into the Linea Aspera, by a tendon into the internal Condyle of the os Femoris

See 218

Give the origin & insertion of the Glutæus Maximus?

A. Rises from the posterior third of of the Spine of the Ilium, side of the Sacrum, Coccyx & Sacro-sciatic Ligament. Inst. into fascia femoris & Linea Aspera. x See 219

Give the origin and insertion of Glutæus Med?

A. Rises from the anterior ⅔ of the Spine of the Ilium, Ant. Sup. Spinous process of the Ilium, the notch below it, the dorsum

Semi tendinosus Membranosus. Biceps Cruris. Pyriform of the Ilium below the spine, and the semi-circular ridge Inst. into Trochanter Major.

see 319

Give the origin & Insertion of Semitendinosus?
A. Rises from the Tuberosity of the Ischium Inst. into the internal surface of the tibia near its tubercle.
2. give its use? a flex the leg on thigh.
Give the origin & insertion of the Semimembranosus?
A. Rises from the tuberosity of the Ischium Inst into the back part of the head of the tibia.
give its use? ~~ans~~ flex the leg on the thigh.
Give the origin & insertion of the biceps Cruris?
A. Rises by its long head from the tuberosity of the Ischium in common with the Semitendinosus by its Short head from the Linea aspera & Ridge leading to the external Condyle. Inst into the head of the Fibula. use. flex the same.
Give the origin & Insertion of the Pyriformis?
A. Rises from within the Pelvis. ant. face of 2, 3 & 4 bones of the sacrum passes out at the upper sacro-sciatic notch Inst into the Trochanter Major.
use? rotates the limb outwards
Give the origin and insertion of the Obturator Internus?

Obturator: Quadratus Femoris: Gemeni: Gastrocnemii

A Rises from the pelvic margin of the foramen thyroideum & the upper part of the plane of the Ischium. Inst into the fossa behind the trochanter major

use: rotate the limb outwards.

Give the origin & insertion of the Gemini?

A The superior rises from the spinous process of the ischium ab ilio rock - The inferior from the tuberosity of the ischium Inserted together at the root of the trochanter major.

use: rotate the limb outwards -

Give the origin & Inst of Quadratus Femoris.

A Rises from the ridge forming the exterior boundary of the tuberosity of the Ischium - Inst into the ridge between the Trochanters

Give the origin & Inst. of Obturator Externus

A Rises from the circumference of the foramen thyroideum except where the obturator vessels pass out Insert into the Cavity of at the root of the trochanter major.

Give the origin & Inst of Gastrocnemius externus?

A Rises by 2 heads one from each Condyle & ridge leading to them. Inst with the Internus into the posterior surface of the os Calcis.

Plantaris. Poplitaeus. Flexor Longus Dig. Ped. Per
What tendon is formed by these muscles?
A. The Tendo Achillis
Give the origin & Insertion of the gastrocnemius Internus?
A. Rises from the head of the fibula & 2/3 of its external angle also from 4 inches of its internal angle & from the oblique ridge on the posterior surface of the Tibia. Inst into posterior surface of the os Calcis.

Give the origin & Insertion of the Plantaris?
A. Rises from the ridge above the external Condyle of the os Femoris Inst into the internal surface of the os calcis.
Give the origin & Insertion of the Poplitaeus?
A. Rises from the depression of the exterior face of the external Condyle Inst into the oblique ridge on the posterior face of the Tibia just below its head
Give the origin & Insertion of the Flexor Longus digitorum pedis Perforans.
A. Rises from the posterior surface of the tibia & descending obliquely till arrives within two inches of the ankle. the fleshy fibres pass obliquely ~~at~~ into a tendon at the posterior edge of the muscle, this tendon runs behind the inner ankle in a groove of the tibia & is secured in its situation by a strong ligament. which is extended from the

Muscles of the Foot.

ankle to the os calcis & having received a tendinous slip from the flexor longus pollicis, divides about the middle of the sole of the foot into 4 tendons which pass through slits in the tendons of the flexor digitorum brevis and are finally attached to the posterior part of the inferior surface of the last phalanx of the 4 small toes

Give the origin & insertion of Extensor brevis digitorum Pedis?

A. Arises from the greater anterior part of the os calcis. Divides into 4 tendons which are inserted into the phalanx of the great toe & the three next it

Give the origin & insertion of Flexor brevis digitorum Pedis?

A. Arises from the large tuberosity of the os calcis divides into 4 tendons which are inserted into the second phalanx of the 4 small toes.

Give the origin & insertion of the abductor pollicis Pedis?

A. Arises from the tuberosity of the os calcis - Cuneiform bone. Os internum. os navicular. & inserted into the internal lateral bone & base of the first phalanx of the great toe.

Muscles of the Foot.

Give the origin & insertion of the flexor brevis pollicis pedis?

A. Rises from under a part of the os calcis & Ext. Cuniform bone. it consists of two bellies the internal is inserted with the adductor pollicis into the internal sesamoid bone. the external with adductor pollicis into the external sesamoid.

Give the origin & insertion of the adductor pollicis pedis?

A. Rises from the calcaneo cuboid Ligament & tops of some of the metatarsal bones. Inst. into external sesamoid bone

Give the origin and insertion of the flexor accessorius?

A. Rises from the inside of the os calcis & ins. into the flexor longus.

Give the origin & insertion of the lumbricales pedis?

A. Rise from the flexor profundus inserted into the first joint of each of the small toes. 4 on each

How many interosseous muscles of the foot? A. 4 on the dorsum. 3 on the sole

Muscles of the Head

Give the origin and insertion of the Occipito Frontalis?

A. Rises from the superior semicircular ridge of the occiput, continues muscular about an inch & a half then becomes tendinous which terminates a little in front of the coronal suture in another fleshy belly which is inserted into the angular process at the root of the os nasi, in the superior margin of the orbicularis palpebrarum and Corrugator Supercilii.

Describe the orbicularis Palpebrarum?

A. It is a circular muscle lying immediately under the skin of the eyelids Rises from the superior nasal process of the superior maxillary bone internal angular process of the os frontis and contiguous part of the os unguis also from the palpebral ligament & inserted into the same

Give the origin and insertion of the Corrugator Supercilii?

A: Rises from the internal angular process of the os frontis & inserted into the lower margin of the os frontis & upper margin of orbicularis palpebrarum

Muscles of the Face

Give the origin & insertion of the Compressor nari?
A. Rises from the root of the ala nasi by a pointed beginning it spreads like a fan over the nostril & joins the fellow of the opposite side.

Give the origin & insertion of Levator Labii superioris alaeque nasi?
A. Rises from the inner or orbita process of the superior maxilla. Inst. into the side of the ala nasi & upper lip.

Give the origin & insertion of the Depressor Labii superioris alaeque nasi?
A. Rises from the inferior part of the upper maxilla. Inst. into the side of the ala nasi and contiguous part of the upper lip.

Give the origin & insertion of Levator anguli oris?
A. Rises from the inferior surface of the superior maxilla. Inserted into the corner of the mouth.

Give the origin & insertion of the Zygomaticus major?
A. Rises from Zygoma malar bone. & inserted into the corner of the mouth.

Give the Origin & Insertion of the Zygomaticus minor?
A. Rises from the anterior depression of the malar bone & inserted into the upper lip.

Muscles of the Face

Give the origin and insertion of the orbicularis oris?

A Rises from fibres of muscle which joins at the angle of the mouth forming a circle Inserted into the same.

Give the origin and insertion of the buccinator

A Rises from the coroccid process of the inferior maxilla and the roots of the alveola processes of the inferior & superior maxilla Inserted into the corner of the mouth.

Give the origin & insertion of the Masseter?

A Rises from the malar process of the upper maxillary bone. from the inferior edge of the malar bone. Zygomatic process of the temporal bone. The internal part is inserted into the coronoid process of the lower jaw, the external into the angle of the lower jaw

Give the origin & insertion of the Temporal Muscle?

A. Rises from the semi circular ridge on the side of the os frontis & os parietale Inserted into the coronoid process of the lower Jaw.

Give the origin & insertion of the External Pterygoideus

Pterygoid Muscles

A. Rises from the Pterygoid ~~[illegible]~~ process of the ~~[illegible]~~ bone (external) & spinous process of the same and tubercle of the upper maxilla. Inserted into the neck of the inferior maxilla

Give the origin and insertion of the Pterygoideus Internus?

A. Rises from the internal Pterygoid process of Sphenoid bone & inserted into the internal face of the angle of the lower Jaw.

Diaphragma.

Q. where is the diaphragm situated?

A. Between the thoracic and abdominal cavities.

Q. Give the origin and insertion?

A. It arises from the ensiform cartilage, from the internal of the cartilages of the seventh true, and of succeeding false ribs

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Circulatory System
Heart

Q. Where is the heart situated?
A. In the Thorax, between the Sternum & Spine being bounded on its sides and greater part anteriorly by the Lungs & below by the diaphragm
Q. What kind of a muscle is it with regard to its structure?
A. A hollow muscular organ.
Q. Where is its base & apex?
A. Its apex is at the intercostal space between the 5 & 6th ribs on a line with their junction with their cartilages – its base is towards the vertebrae & obliquely backwards towards the right side
Q. By what is the heart enveloped?
A. By a double membrane called the pericardium.
Q. Into what cavities is the heart divided?
A. 2 Auricles & 2 Ventricles.
Q. Which is the most anterior the right auricle & ventricle or the left?
A. The Right.
Q. What is the right auricle & ventricle taken together called?
A. The Right. Pulmonic. Anterior. or Venous Heart.
Q. What is the Left called?
A. Systemic. Left posterior, or Aortic Heart

Heart

Q. What is the figure of the right Auricle?
A. An oblong conoidal Cavity
Q. At what part does it join the descending Vena Cava.
A. At its posterior superior angle
Q. Where by the ascending vena Cava?
A. At its posterior inferior angle
Q. What other blood-vessel empties into this cavity & at what part.
A. The coronary vein at the lower part just in front of the ascending Cava.
Q. What is the direction of the orifices of the 2 large veins?
A. Slightly forward one ascending the other descending forming an obtuse angle
Q. What is the structure of this part of the Auricle?
A. It is a continuation of that of the vein.
Q. What is that prominence called, about midway between the junctions of the 2 Cavae.
A. Tuberculum Loweri.
Q. What is that part of the auricle situated in front of the venae Cavae called?
A. The pouch or sinus.
Q. What is that depression on the auricular septum
A. Fossa Ovalis

Heart

Q. By what is it surrounded?
A. A ridge called the annulus
Q. What is there just below the ~~Eusta~~ Fossa Ovalis
A. Eustachian valve.
Q. What is the valve at the orifice of the coronary vein called?
A. Valvula Thebesii
Q. How are the walls of the sinus formed?
A. Of muscular fibres collected into small fasciculi called musculi pectinalis between these are interstices. when the internal and external membranes come in contact are diaphanous
Q. What is the hole called between the right auricle & ventricle?
A. Ostium venosum. about an inch in diameter
Q. What is the figure of the right ventricle?
A. A triangular Pyramid.
Q. By what is the internal surface covered?
A. The Columnae Carneae.
Q. How many are usually connected with the valve
A. From 6 to 10.
Q. What are those parts inserted into the floating edge of the valve called?
A. Chordae Tendineae.
Q. What valve between the Auricle and ventricle
A. The Tricuspid Valve.

Heart

Q. Where is the orifice of the Pulmonary artery?
A. Above the auricular ventricular opening
Q. What are the valves at the orifice of the pulmonary called?
A. Semilunar or Sigmoid valves
Q. What is there in the centre of each valve
A. Small cartilaginous bodies called Corpuscula Arantii
Q. What are those fronches between the outer surface of each valve & the artery called?
A. Sinus of Valsalva

Q. What is the figure of the left auricle?
A. It is more square than the right
Q. What orifices are in it?
A. The orifices of the 4 pulmonary veins and the auriculo ventricular opening

Q. What is the shape of the left Ventricle?
A. Conical
Q. Is its internal surface arranged on the same principle as the right?
A. Yes, but it indicates more strength
Q. What valve between it & the left auricle
A. The mitral or Bicuspid
Q. What at the orifice of the Aorta?
A. Semilunar See Page 221

Arteries.

Q. Are there the Corpuscula Arantii at the valve of the Pulmonary Artery?
A. They have not one Larger
Q. Are the Sinuses of Valsalva there?
A. They are
Q. In what direction do the superficial fibres on the external surface run?
A. Spirally
Q. How many strata of muscular fibre compose the left Ventricle?
A. Six.

Q. Are the Arteries a proper name in regard to their functions?
A. No.
Q. How is the arterial system divided?
A. Pulmonic & Aortic.
Q. To what has the arterial system been compared?
A. To a tree. And also to a Cone
Q. How many coats have an artery?
A. 3. External, Middle & Internal
Q. What is the External formed?
A. Condensed Cellular tissue
Q. What does the middle consist?
A. Of circular fibres but not muscular

Aorta & Coronary arteries.

Q. What is the inner Coat?

A. A very delicate serous membrane.

Q. Of what is it an extension?

A. Of the endocardium

Aorta

From what part of the left Ventricle does the Aorta arise

A. Superior Posterior portion.

Q. What is the first portion called?

A. Ascending Aorta.

Q. What next?

A. Horizontal or arch of the Aorta

Q. What next?

A. Descending

Q. What distance is the arch of the Aorta from the superior part of the Sternum?

A. About one Inch

Q. To which side of the Spine does the Aorta incline in its descent?

A. To the left.

Q. What does the horizontal portion cross?

A. Left Bronchus

Q. What are its first branches

A. The two Coronary Arteries. and are distributed to the substance of the Heart which they nourish.

Arteria Innominata. &c

Q. What branches given off by the Aorta at its arch?
A. Arteria innominata. Left Subclavian, left primitive Carotid.
Q. Are these arteries always regular in their origin?
A. They frequently deviate from the above answer
Q. Give the usual length. direction and termination of Arteria Innominata?
A. Length from 1 to 1½ inch. runs obliquely upward to the right. & terminates in the right Subclavian & primitive Carotid
Q. How and where does the primitive Carotid terminate?
A. It terminates at the Space between the Thyroid Cartilage & Os hyoides in the internal & External Carotid arteries.
Q. What coverings lie on it at the lower part?
A. Skin, superficial fascia. platisma myoides Sterno Cleido mastoid Sterno-hyoid & thyroid
Q. What covers it when it lies by the side of the larynx?
A. Skin. fascia. Platysma myoides
Q. What large vein anterior and external to it
A. Internal Jugular
Q. By what muscle is it crossed in a line with the lower end of the Thyroid Cartilage
A. Omo hyoid.

External Carotid

Q. At what point does the Primitive Carotid become superficial?
A. At the decussation of the Omo hyoid & Sterno cleido mastoid.
Q. What nerves are enclosed in the same sheath with this artery?
A. Pneumogastric & Descendens Noni.
Q. What nerve situated behind it?
A. The sympathetic.
Q. What is the direction of the artery?
A. Upwards between the two muscles dividing the space into two triangles.
Q. What is the internal Carotid?
A. From the primitive Carotid to the neck of the lower Jaw.
Q. In what does it terminate?
A. Temporal & Internal maxillary.
Q. Is this artery superficial at first?
A. It is. being covered only by the Platysma myoides & Integuments.
Q. By what nerve is it crossed just above its superficial space?
A. Hypoglossal.
Q. Through what gland does it pass?
A. The Parotid.

Thyroid. Lingual Facial

Q. What is the first branch of the External Carotid.
A. Superior Thyroid.
Q What is its direction
A. At first inwards & forwards on the side of Larynx. then descends to the Thyroid gland.
Q What is given off by the S. Thyroid?
A. Laryngeal distributed to the lining membrane of the Larynx.
Q From which part of the external Carotid does the lingual arise?
A. About one inch from its origin
Q What is its first branch?
A. Dorsalis Linguæ
Q. What is its continuation called?
A. Ramus Raninus.
Q From what does the facial arise?
A. Ext. Carotid runs above the lingual
Q. By what muscles is its root covered?
A. The Stylo Hyoid & Digastric.
Q By what nerve traversed externally
A. Hypoglossal
Q. What gland lies just below it?
A. The Submaxillary gland
Q When does it get over the Inferior maxilla?
A At the anterior margin of the masseter muscle

Submental. Coronary. Pharangeal. &c

Q. From what part does it the Submental artery arise?

A. From on a level with the base of the lower Jaw

Q. What is the next branch of the facial & where distributed?

A. Inferior Labial. distributed on the middle of the Chin.

Q. What sent off near the corner of the mouth from the facial.

A. The Coronary. Inferior

Q. Which is the next branch?

A. Superior Coronary.

Q. Where does the facial artery terminate?

A. At the internal canthus of the eye.

Q. Give the origin ~~inter~~ situation & distribution of the Pharangeal artery:

A. Rises from the Ext. Carotid. above the Lingual art & on the side of the Pharynx. between the internal & Ext. Carotid & distributed to the muscles of the Pharynx.

Q. What branch given off?

A. Posterior Meningeal

Q. Give the origin & distribution of the occipital.

A. It comes from the Ext. Carotid, generally opposite the facial. & is spent before the integuments on the back part of the head

Auricular. & Temporal. &c.

Q. Describe the Posterior Auricular artery?

A. Comes from the external Carotid, first below the parotid gland. at first enclosed by it. then ascends backwards between the mastoid bone & Ext. ear. distributed to the integuments on the side of the head. and ext ear.

Q. What branch from it?

A. Stylo mastoid

Q. Which is the larger terminal artery of the Ext Carotid?

A. The internal maxillary.

Q. What artery given off from the Temporal while in the parotid gland?

A. Transverse facial

Q. Of what is the middle Temporal a branch?

A. The Temporal. distributed to Temporal muscle

Q. How ~~many~~ near to the external ear does the temporal artery run.

A. about one inch from the anterior part.

Q. What sent off at this point?

A. The Auricular

Q. Into what does the Temporal art. divide?

A. Ant. & Post. Temporal.

Q. In what artery is arteriotomy performed usually

A. Anterior Temporal.

Internal maxillary

Q. Give the situation & direction of the internal maxillary?

A. At first it winds round the neck of the lower Jaw getting to the inner side: the first part of its course is horizontally inwards, it then ascends as far as the lower part of the temporal bone lying in front of the Pterygoideus externus muscle it then passes forward.

Q. How many branches arise off from it?

A. Twelve.

Q. Name them?

A. Arteria ophthalmica: Meningea parva & magna. Arteria maxillaris or Alveolaris inferior. Arteria temporalis profunda (2) Arteria Pterygoidea. Arteria Buccalis: Alveolaris. Infra-Orbitalis. Palatina Superior. Pharyngea superior. Sphenopalatina

Subclavian Artery

Q. From what does it arise?

A. On the right side from the innominata. On the left from the Aorta generally near the Sternoclavicular articulation.

Q. Where does this artery lose its name?

Subclavian & its relations

A. At the inferior margin of the Subclavian muscle.

Q. Give the division made of this artery?

A. 3. 1st to the Scalenus anticus muscle: 2 the portion between the Scaleni muscles: 3 from the margin of the Scaleni to the Subclavian muscle.

Q. Have the two Subclavian arteries the same relations?

A. They have not in the first portion.

Q. Which is the more superficial?

A. The Right.

Q. By what nerves & vessels is the first portion crossed in front on the right side

A. Par vagum. filaments from the great sympathetic & phrenic nerves & internal Jugular vein.

Q. What nerve directly behind it?

A. The Recurrent. & last cervical ganglion

Q. With what is it in contact below?

A. The Pleura.

Q. What is the difference in the direction of the two Subclavian arteries?

A. The left is more vertical

Q. What relation have the vessels which cross the right to the left Subclavian.

A. They lie on the inner side of it.

Subclavian. and branches

Q What vessel lies close to the subclavian on the left side?

A. The Thoracic Duct.

Q What vessel situated in front and just below the second part of the subclavian artery?

A Subclavian vein.

Q. Which is the largest artery given off from the subclavian?

A The vertebral.

Q Give its course & ~~direction~~ distribution?

A. It ascends on the side of the Spine. enters the canal of the transverse processes at the 6th vertebra of the neck. it gets into the Cranium through the foramen magnum. distributed to the brain

Q From what part of the subclavian does the inferior Thyroid arise?

A At the inner margin of the Scalenus muscles near the origin of the vertebral.

Q What is given off by it?

A Ascending Cervical artery

Q Give the course and distribution of the inferior costal arteries?

A. Descend across the neck of the first rib. divide into branches which supply the two upper inter costal spaces.

Q Give the course of the internal mammary?

Internal Mammary, Phrenic. &c &c

A. Descends along the internal margin of Scalenus Anticus. Having entered the thorax descends on the posterior face of the Costal Cartilages about 3/4 inches from the margin of Sternum.

Q. Upon what is the phrenic nerve spent.

A. Upon the diaphragm

Q. What other branches given off by the internal mammary?

A. At each intercostal space which it crosses it gives off a branch which is spent on the fore part of the intercostal muscles and anastomoses with the corresponding intercostal arteries. Other branches also leave at each intercostal space which are distributed to the muscles of the front of the Thorax.

Q. Where does the internal mammary terminate

A. Generally on a line with the anterior end of the fifth rib dividing into two branches. internal & External.

Q. Upon what is the posterior or transverse cervical artery distributed?

A. Trapezius. Levator Scapulae Rhomboid & Serratus magnus muscles

Q. Of what is the Superior Scapular generally a brach.

A. The Subclavian.

Axillary. Acromial

Q What portion of great artery of the Superior Extremity is called the axillary?

A The portion from the Subclavian muscle to the lower margin of the tendon of the Latissimus dorsi.

Q How is this artery divided?

A. Into 3 portions. 1 to the Pectoralis minor muscle 2 the part under that muscle 3 to the tendon of Latissimus dorsi.

Q What bone vessel situated ~~to the~~ internal ~~and posterior~~ to the first part?

A. The axillary vein.

Q What is then situated internal & posterior to the first portion?

A. The axillary plexus of nerves

Q What nerve passed in front of the vessel?

A Anterior Thoracic nerve.

Q By what is the second portion surrounded

A By branches of the axillary plexus.

Q What nerves lie near the third portion

A. Median. internal & external Cutaneous. Radial & ulnar nerves.

Q Give the course & distribution of the acromial artery?

A. Soon after its origin it divides into ascending and descending. the former reaches the capsula & is distributed to the muscles there

Axillary & Brachial

the other passing between the deltoid and Pectoralis minor is distributed to them —

Q Upon what is the superior Thoracic artery distributed?

A Pectoralis major & minor muscles

Q Give the course & distribution of the Thoracica Longa?

A It descends the Pectoralis major & Serratus magnus muscles and are distributed to them

Q What is the origin & course of Anterior Circumflex artery?

A. Rises from the axillary just above the tendon of Latissimus dorsi, it surrounds the front of the neck of os humeri and is distributed to the deltoid & articulation.

Q Which is the larger the anterior or posterior Circumflex?

A Posterior

Q Give its situation and distribution?

A Surrounds the posterior face of the neck of os humeri distributed on the deltoid

Q When does the Brachial artery terminate?

A Just below the elbow joint.

Q What is its situation in relation to the os humeri?

A. It is first on the inside then winds round to the outside

Branches of the Brachial

Q What nerve passes in front of it?
A. Median nerve.
Q What vessels lie on either side?
A. Brachial veins
Q What vein crosses it at the lower portion
A. Median basilic crosses obliquely.
Q What is the first branch of the Brachial
A Profundus major Humeri
Q Give its course & distribution?
A. Passes down between the first & 3d head of the Triceps & winds spirally round the os Humeri. in company with the radial nerve down to the external Condyle. distributed to the Triceps
Q Give the origin & distribution of the Profundus minor Humeri?
A. Rises from the Brachial two or 3 inches below the last. distributed principally on the internal face of the Triceps
Q Which is the next branch?
A The Nutritious artery.
Q Of what is the anastomotic artery a branch & with what does it anastomose
A It comes from the lower part of the Brachial & anastomoses with the ulnar recurrent artery
Q In what does the Brachial terminate?
A. Radial and ulnar

Radial & branches. Ulnar

Q. Give the course of the Radial?

A. In the upper part of the arm it is between Supinator Radii Longus & Pronator Teres. it crosses the latter, runs in front of the radius passes between the Supinator & flexor Carpi ulnaris below the styloid process it passes between the Carpeus & Extensor muscles of the thumb, it then gets to the palm of the hand between the metacarpal bone of the thumb and fore finger.

Q. What is the first branch?

A. Recurrens Radialis

Q. Where does the Superficialis vole arise?

A. Near the inferior margin Pronator quadratus.

Q. Mention the origin & distribution of Cubitalis Carpi?

A. From the Radial at the Carpus. it gives off the posterior interosseous arteries of the hand.

Q. In what 3 arteries does the Radial terminate?

A. Magnus Pollicis. Radialis Indicis. Palmaris Profunda.

Q. Give the course of the Ulnar?

A. After its rise it gets under several muscles of the internal Condyle. it runs nearly parallel with the ulnar being at first deep seated, becomes superficial at the wrist. it passes over the annula-

Ulnar & Branches

ligament and then passes to the palm of the hand

Q What is the first branch of the ulnar?

A Recurrens ulnaris

Q Of what is the interosseous a branch?

A. Rises from the ulnar.

Q Give the course & distribution of the anterior interosseous?

A. It runs in contact with the interosseous ligament to the upper margin of the Pronator Quadratus under which it perforates the interosseous ligament, distributed on the back of the carpus & hand

Q Give the distribution of the Posterior Inter—

A. It gives off a recurrent branch which anastomoses with recurrent ulnaris & radialis distributed to the muscles on the back of the fore arm.

Q Give the distribution of the Dorsalis manus?

A. Back of the wrist, metacarpus & fingers

Q How is the ulnar terminated?

A. Between the aponeurosis palmaris and the flexor tendons it forms a curve called arcus sublimis.

Bronchial. Oesophageal. Intercostal.

Q What is the first branch given off by the descending Thoracic Aorta?

A. Bronchial arteries

Q What is the usual number of them?

A. Two, sometimes there are four

Q Give the course & distribution?

A. They follow the course of the Bronchiæ into the lungs and are distributed with them.

Q Name the origin number & distribution of the Oesophageal arteries?

A. Two or six small arteries come successively from the descending Thoracic Aorta & are distributed to the Oesophagus

Q What number Aortic Intercostal arteries?

A. From 8 to 10.

Q What branch given off from this about the head of the rib?

A. Named Dorsalis

Q Give the course and distribution of the intercostal arteries?

A. Those on the right side after crossing the spine give the rib near its tubercle as do those on the left side, & go along the groove on the inferior margin of the rib between the internal & External intercostal muscles for 2/3 the length of the rib, it is then upon the intercostal muscles and contiguous parts. Anastomosing in front with Internal Mammary

Celiac. Gastric. Splenic. Hepatic &c

What is the first artery given off by the abdominal Aorta?

A. Inferior Phrenic. usually two in number

Q. Give the origin & termination of Celiac?

A. Rises from the Aorta between the pillars of the diaphragm. it is about one inch long. it divides into the gastric Splenic & Hepatic

Q. Give the course & distribution of the Gastric?

A. It proceeds forwards and to the left, joins the Stomach at the Cardiac orifice detaches some branches to the Oesophagus. runs along the smaller curvature send branches to the anterior & posterior Surface

Q. Give the course of the Hepatic?

A. It inclines to the right side & reaches the Liver through the Capsule of Glisson

Q. What large branch given off from it near the Pylorus?

A. Gastric Epiploic Artery

Q. Give the course and distribution of Right gastric or ~~Epipl~~ Gastro Epiploic?

A. Descends between the duodenum & Pancreas reach the greater curvature of the Stomach, to the right half of which with the great omentum it is spent.

Q. Give the distribution of Hepatic?

A. At the transverse fissure of the Liver it divides into a right & left branch. the former sends of the Cystic to the Gall Bladder. it is then

Left Gastric Vasa Brevia. Mesenteric

Point on the right lobe. & the left on the left lobe.

Q. Give the course of the Splenic?

A. It goes to the left along the superior margin of the Pancreas performing several flexuosities before it arrives at the Spleen.

Q. Give the origin & distribution of the left Gastric & Pancreatic from the left extremity of the Splenic.

A. It attaches itself to the left extremity of the Stomach and goes along the left of the greater Curvature detaches branches to the anterior & posterior surface & omentum magnum & anastomoses with the right Gastric.

Q. What other branches given off from the Splenic?

A. Just before entering the Spleen five or six branches are given off which go to the greater end of the Stomach & are called Vasa Brevia.

Q. What artery comes from the Aorta next to the Celiac?

A. Superior Mesenteric.

Q. Give the course of its principal trunk?

A. It passes behind the pancreas then in front of the duodenum & makes its mesentery below the Pancreas of which it is distributed forming a curvature to the left.

Q. How many branches from the Convexity?

A. From 15 to 20.

Colic & Capsular

Q. After what manner & to what distributed?
A. They pierced to the left towards the small intestines forming 3 or 4 rows longitudinally of anastomotic arcades the branch from which becoming more numerous & smaller to the margin of the small intestines ~~tal~~ cease by sending off a great number of parallel branch
Q. What 3 arteries from the Concavity of the Superior Mesenteric.
A. Colic Arteries. Inferior, called Ileo Colic: Middle. Colica Dextra: Superior, Colica Media
Q. So what is the Ileo Colic distributed?
A. Lower part of the Ileum & commencement of the Colon anastomosing on the left with the last of the small intestinal arteries. on the right with Colica dextra.
Q. To what is the Colica dextra distributed?
A. To the ascending Colon.
Q. To what is the Colica Media distributed?
A. Transverse Colon. anastomosing on the left with Colica Superior of the inferior mesenteric Artery.
Q. How the origin & distribution of the Capsular Arteries?
A. They arise from the aorta just below the Superior mesenteric. Sometimes from the Emulgents. distributed to Capsula Renales.

Emulgent. Spermatic. Colic. Hemorrhoidal

Q. Give the origin & distribution of the Emulgent or Renal arteries?

A. They rise from the aorta just below the Sup. Mesenteric distributed to the kidneys.

Q. For what is the Spermatic artery branch ake?

A. Its great length.

Q. Upon what is it distributed?

A. The testicle of the male. the ovaria & ligaments of the female.

Q. Name the origin of Inf. Mesenteric?

A. About 1 inch above the division of the Aorta

Give its course & termination?

It incline downwards to the left side gets behind the Cecum of these colon. It then divides into 3 branches called the left Colic Arteries.

Q. Upon what is the middle Colic distributed

A. The descending & ascending portion of the Sigmoid flexure of the Colon anastomosing with the superior & inferior forming arches.

Q. Upon what is the inferior distributed?

A. Sigmoid flexure of the Colon & Rectum

Q. Upon what is the Inferior Hemorrhoidal?

A. The Rectum.

Lumbar: Sacral — Middle

Q. Give the origin & number of the Lumbar arteries.
A. Usually five on either side, arise from posterior external part of the aorta opposite the middle of the Lumbar vertebrae.
Q. Into what do these divide at the base of the transverse processes.
A. Two branches, the anterior or Lumbar & posterior or Dorsal branches.
Q. Upon what is the ant. distributed?
A. Broad muscles of the abdomen.
Q. Upon what is the posterior?
A. It detaches branches through the intervertebral foramina to the lower part of the Medulla-Spinalis & Cauda Equina, the remaining portion goes to the back, is spent on muscles near the Spine.
Q. Give the origin & distribution of the Mid dle Sacral artery.
A. It arises very near the bifurcation of the Aorta, descends in front of the fifth lumbar vertebra & Sacrum, to the Coccyx, it sends off a pair of branches for each pair of Sacral foramina which penetrates to the Cauda Equina.
Q. When does the bifurcation of the Aorta take place?
A. Opposite the space between the 4 & 5 Lumbar vertebrae.

Iliac: Sacral Lateral: Obturator

Q What is formed by its bifurcation?
A Primitive Iliac Arteries
Q How far do they extend?
A Near Sacro Iliac Symphysis
Q In front of what vein do they lie?
A Primitive Iliac
Q What arteries formed by its bifurcation?
A. External & Internal Iliac
Q By what nerves is the internal Iliac bounded behind?
A. Sacral Plexus of Nerves
Q Which is commonly the first branch from the internal Iliac or its posterior trunk when a bifurcation has taken place?
A Ileo Lumbar Artery.
Q What is the number origin & distribution of the Lateral Sacral Arteries?
A. Their number is generally equal to the number of foramina in the Sacrum, through ~~which~~ they generally come from one or two roots from the Internal Iliac they are spent on Cauda Equina.
Q What is the usual origin of the obturator.
A From the internal Iliac. but sometimes from the Epigastric or External Iliac

Hemorrhoidal middle: Vesical: Gluteal:

Q. Is there danger in wounding this artery in operating for crural Hernia?

A. Yes when it has an anomalous origin if the incision be made upwards or inwards

Q. Through what does it pass out from the Pelvis

A. Upper part of the ischium foramen.

Q. When what is the middle Hemorrhoidal distributed?

A. The rectum, vesicula seminale & prostrate gland in the male & to the vagina in the female

Q. From what do the vesical arteries usually come?

A. From what was the umbilical artery of the foetus. it is distributed to the bladder

Q. Give the origin & distribution of the uterine?

A. Rises from the internal Iliac it gives some branches to the vagina. ascends between the laminæ of the broad ligament of the uterus when it is expanded.

Q. Is it much tortuous when the uterus is impregnated?

A. Yes.

Q. What are the terminating branches of the internal Iliac?

A. Gluteal & Ischiatic

Q. How does the Gluteal get from the Pelvis?

A. Passes through the upper part of Ischiatic notch

Ischiatic: Pudic: Perineal: Urethro-Bulbar
above the pyriformis muscle.

Q. In what manner does the Ischiatic issue from the Pelvis?

A. Descends between the rectum & pyriformis muscles and goes out the lower part of the notch.

Q. In front of what nerve is it placed?

A. Sciatic nerve.

Q. What artery given off from it while in the Pelvis

A. Internal Pudic artery

Q. Of what is the inferior Hemorrhoidal a branch & to what distributed?

A. Of Pudic. Spent upon the lower part of the Rectum & Sphincter Ani muscle

Q. Of what is the Perineal a branch and to what distributed?

A. Of Pudic. Spent upon the muscles and ligaments of the perineum & posterior part of the scrotum. in the female to the lower portion of the vagina & External Pudia

Q. Upon what is the urethro bulbar artery distributed?

A. First part of the urethra. Corpus Spongiosum & Cavernosum.

Q. What other arteries spent on the penis?

A. Superficial Dorsal. & Cavernous arteries

Ext. Iliac: Epigastric: Circumflex Iliac

Q. What is the extent of the Ext Iliac Vessels
A. From the bifurcation of Primitive Iliac to Poupart's Ligament.
Q. What is its relation with external Iliac vein
A. It is at first anterior to the vein, but as it approaches Poupart's Ligament it becomes External.
Q. About what point does it pass under Poupart's Ligament?
A. Midway between Ant. Sup. Spinous Process of the Ilium & Symphysis pubis.
Q. What branches gives the Ext Iliac?
A. Epigastric & Circumflex Iliac
Q. Give the course and distribution of Epigastric
A. It passes at first horizontally inwards then upwards behind the Spermatic cord at the pubic margin of the internal abdominal ring it reaches the rectus muscle it ascends on this muscle and is there spent.
Q. What is the extent of the Femoral Artery?
A. From crural arch to the point where it perforates the adductor magnus about ⅓ the length of the os Femoris above the knee.
Q. Is it superficial at first?
A. It is. no muscles covers it.
Q. Return what muscles does it lie at the upper portion?

Femoral. Superficial Abdominal Prof. Fem.

A. Psoas Magnus & Pectineus.

Q. Where does it become deep seated?

A. At the apex of the angle formed by the Sartorius & adductor Longus.

Q. What is the situation of the artery with respect to the Femoral vein 3 or 4 inches below Poupart's Ligament?

A. It is anterior to the vein.

Q. What is the first branch from the Femoral & on what distributed?

A. Superficial Abdominal. Spent upon the integuments of the abdomen & the inguinal glands.

Q. What is the usual number of the External Pudic?

A. Usually 2 or 3. distributed upon the integuments pubes. penis & Scrotum of the Male. Labium Externum of female. The Inguinal glands also receive blood from these arteries.

Q. What large artery comes from the Femoral. 1 or 2 in. below the Crural Arch?

A. Profunda Femoris. Wound between adductor longus & Vastus Internus.

Q. Give its course and distribution?

A. Goes between the Rectus Femoris & Crural & giving branches to them. it divides into an ascending and descending branch. the former

Branches of Femoral. Popliteal is spent upon the Gluteal muscles and the Capsule of the joint. anastomosing with the Gluteal & Ischiatic. the descending is spent principally upon the vastus externus & Crureus

Q. Give the course & distribution of the internal circumflex?

A. Passes between the pectineus & Psoas magnus then winds under the neck of the os femoris then divides into 2 branches. the superior is distributed to the Capsular ligament. Obturator externus. adductor magnus — the lower upon the adductor magnus. Gracilis and hamstring muscles.

Q. What is the usual number of Perforating muscles?

A. 4. spent on the posterior muscles of thigh

Q. Of what is the anastomosing artery a branch

A. the Femoral.

Q. What is the continuation of the Femoral called after passing through the adductor magnus?

A. Popliteal

Q. When does the Popliteal terminate?

A. At the opening in the adductor ligament of the leg ~~about~~ just below the head of the Tibia.

Articular. Gastrocnemii. Tibial.

Q. What is its situation at the knee joint?
A. It is placed between the condyles of the Femur & between the internal & External hamstring muscle surrounded by a mass of adipose mass.
Q. What is its relations to the popliteal vein & nerve?
A. It is anterior to the vein - vein is anterior to the nerve.
Q. How many articular arteries & what called
A. 5. Superior Internal & External. Inferior Internal & External. & Middle articular Artery
Q. Upon what distributed?
A. Knee joint. and contiguous structures.
Q. Of what is the Gastrocnemii arterial branches
A. Popliteal.
Q. How does the Popliteal terminate?
A. In the post & ant Tibial.
Q. What is the extent of the Ant Tibial?
A. To the base of Metatarsal bone of great Toe
Q. Give the relational Situation of this artery.
A. It rest upon the front of the interosseous ligament it is bounded on the tibial side by the Tibialis anticus. on the other side superiorly by the Extensor longus digitorum pedis. lower down by the Peroneus pedis, just above the ankle joint it rests on the front of the tibia. The Anterior Tibialis nerve adheres to it the whole way

Branches of the Tibials

Q What is the first branch of the ant Tibial?
A Recurrent Tibial
Q Give the origin & distribution of the internal malleolar artery?
A Rises from ant Tibial & ramifies on the internal malleolus and adjacent posterior articulation
Q Has the ext malleolar a similar origin & distribution?
A It has
Q What other branches from the anterior Tibial
A Tarsal. Metatarsal. Dorsal of the great toe.
Q How does the ant Tibial terminate?
A. At the posterior end of the first metatarsal interval it strikes down to the sole of the foot & joins the external plantar artery
Q What is the extent of the post Tibial?
A From the Popliteal to the tuberosity of os calcis
Q Give its relations?
A. On the surface first of the Flexor longus digitorum in the upper ⅔ it is concealed by gastrocnemius & soleus muscles. In the inferior third it is at the margin of Tendo Achillis, it passes between the tendon of the Tibialis posticus & Flexor longus digitorum. Posterior tibial nerve on its external margin.

Plantar &c &c.

Q What is the first branch of Post Tibial
A. Peroneal
Q Is it superficial or deep seated?
A Very deep being covered behind by Flexor longus Pollicis. Soleus & Gastrocnemius
Q Upon what distributed?
A. Muscles on the back of the Leg, upper external part of foot & muscles & integuments of External Ankle.
Q What are the terminating branches of the Posterior Tibial?
A. Internal & External Plantar arteries
Q To what is the internal Principale distributed?
A. Muscles of the great toe & Flexor brevis digitorum pedis.
Q What are the principal branches of the External Plantar.
A. The branches which supply the muscles that rise from the tuberosity of os Calcis – External digital artery of the little toe. 4 digital arteries of the foot and the perforating arteries

Jos. A. Eve M. D.

Augusta Ga.

Notes on Anatomy
Hamilton R. Pierce
Columbus
Ga.

Venous System

Q What are the veins called which accompany the arteries?
A. Comites, or satellites.
Q. Which is the greatest the area of the venous or arterial? M. D. or more properly speaking
A. The venous. Mule Driver So says the Prophet
Q What number of veins usually attend an artery? Swat Boy says [redacted]
A Generally two but in the viscera of the abdomen usually there is but one
Q What coats have the veins?
A An external cellular & internal serous coat
Q. Why is it that parts of mobility occur both superficial & deep seated veins?
A. To secure the circulation of the part in motion
Q. What is there existing at certain places in the serous coat of the veins?
A. Duplications or valves
Q Are the most abundant in the superficial?
A. They are.
Q What promotes the circulation of blood through the veins?
A. The contraction of the heart, their own elasticity, pulsation of the arteries, contraction of the muscles, compression of the valves

Superior Vena Innominata

Q What venous trunks empty into the right auricle?

A Ascending & Descending Cava & Coronary vein.

Q From what portion of the system does the Superior Cava return the blood?

A The portion above the diaphragm.

Q By what veins is it formed?

A Vena innominata, or Brachio Cephalic

Q Describe its situation

A It extends from between the cartilage of the first rib on the right side and arch of the aorta to the posterior superior part of the right auricle inclining to the left and forwards, in its course the superior third is in contact with the Pleura and on the left with the arteria innominata, the Aorta is on its left anterior face lower down.

Q What is the length of this vein?

A From 2½ to 3 Inches

Q What veins empty into it?

A. Only the vena azygos

Q By what is the Vena Innominata formed?

A. Subclavian & Internal Jugular,

Q What is the difference in these veins on the right & left side

Veins of the Neck.

Q. That on the left side is longer, descends more obliquely, crosses behind the superior end of the Sternum & in front of the large vessels proceeding from the arch of the Aorta.

2 What is the vein on the left side sometimes called?

A. The Transverse vein

3 In what does the inferior Thyroid vein empty?

A. Left Brachio Cephalic or Transverse

2 What other veins empty into the Vena Innominata?

A. Vertebral. Superior Intercostal. internal Mammary.

2 What is the extent of the internal Jugular?

A From the base of the Cranium to the internal margin of first rib near the insertion of the Sternus Mastoid.

2. By what is the internal Jugular formed

A. By the Sinuses of the Dura Mater.

3 Through what does the blood pass which forms the internal Jugular?

A Foramen Lacerum.

2 What is the relation of the Int. Jugular vein with the Sterno Cleido Mastoid Muscle.

A. Beneath it & nearly parallel with anterior margin

Veins of the Head, face &c.

Q By what muscle is it crossed half way down the neck?

A The Omo Hyoideus

Q Does the internal and external Jugular anastomose?

A They do by one or two large branches

Q What veins unite to form the internal Jugular?

A. Occipital. Lingual. Facial. Pharangeal. Superior Thyroidal

Q What names are given to portions of the facial veins?

A On the forehead Frontal. at the inner Canthus of the eye its called External angular.

Q. What is the situation of the ranine vein?

A On the under surface of the tongue

Q Where does the Submental vein?

A. From the Sublingual & Submaxillary glands

Q From what is the inferior Palatine?

A. The soft Palate & Tonsils.

Q Give the origin of the lingual

A. From a plexus of veins at the root of the tongue.

Q ——— of Pharangeal?

A From a plexus of the Pharanx.

Q. ——— of Superior Thyroid?

A. Thyroid gland & Larynx.

Q ——— of Occipital?

A From the back of the Head

Ext. Jugular. Temporal. &c &c.

Q. Where does the External Jugular vein empty?

A. Into the Subclavian just behind the clavicle at the external margin of the Sterno Cleido Mastoid & in front of the scalenus Anticus muscle

Q. Do the external Jugular veins communicate with each other?

A. They do by one or two branches

Q. What is the External Jugular a continuation of?

A. Of the Temporal.

Q. Between what muscles does it descend?

A. Platysma myoides & Sterno Mastoid

Q. What veins empty into the External Jugular

A. The Superficial Cervical

Q. By what is the Temporal formed?

A. Middle Temporal. Superficial Temporal

Q. Through what gland does the Ext. Jugular vein pass?

A. Parotid

Q. By what vein is it joined near the neck of the lower Jaw

A. Internal maxillary.

Q. By what other veins is joined in the Parotid gland?

A. Auricular, Posterior. Transverse Facial

Veins of the Upper Extremity.

Q. On which surface of the hand are the superficial most numerous?
A. On the Dorsal surface.
Q. How many veins of the hand have proper names?
A. Two. Cephalic, and Salvatella.
Q. On which margin of the arm is the Cephalic situated?
A. Anterior, Radial.
Q. Describe its situation on the arm?
A. Ascends along the external margin of Biceps flexor cubiti then between the Deltoid & Pectoralis major. & Subend near the Clavicle.
Q. What vein does it then join?
A. Axillary vein.
Q. Describe the Basilic which joins the Salvatella?
A. Usually consists of two trunks, one runs on the front of the ulnar side of the fore arm, & discharges in the Median Basilic. the other is the largest runs along the posterior edge of the ulna to the bend of the arm. then forms the internal Condyle & afterwards becomes the brachial.
Q. Where does the median arise?
A. From palm of the hand wrist & front of fore arm. it ascends on the front forearm and divides.
Q. What veins are formed by the division of Median?
A. Median Cephalic. & Median Basilic.

Veins of the lower Extremity.

Q. What is the extent of Vena Cava Inferior?
A. From the chest between 4th & 5th Lumbar Vertebra to the posterior inferior part of the right auricle.
Q. On which side of it is the Portal?
A. On the Left.
Q. When does the crural & saphena veins arise?
A. Internal side dorsum foot & Ext. Malleolus.
Q. Describe its course?
A. Commence behind the external malleolus. it ascends along the inside tibialis & posterior surface Gastrocnemius muscle.
Q. Into what vein does it empty?
A. Popliteal.
Q. Where does the great Saphena have its origin
A. From the internal superior part and side of the foot
Q. Describe its course?
A. Ascends along the internal face of the leg over the internal condyle up the internal face of thigh corresponding nearly with the internal margin Sartorius muscle.
Q. Where terminates?
A. In the femoral vein 1 or 1½ inches below Poupart's Ligament.
Q. What veins received by the external Iliac
A. Epigastric & Circumflex Iliac

Abdominal & Pelvic Veins

Q. What Plexuses are formed by the origin of the Internal Iliac vein?

A. Hemorrhoidal. Vesical. Sacral, Pudendal, Vaginal, & Uterine.

Q. What other veins contribute to its formation after the origin mentioned

A. Gluteal. Obturator & Ilio Lumbar.

Q. What veins received by the Vena Cava Superior?

A. Middle Sacral, Lumbar, Spermatic, Emulgent, Capsular. Hepatic and Phrenic veins.

Q. What is that plexus called formed along the Spermatic vein?

A. Corpus Pampiniforme

Q. From what arteries does the vena Portarum draw its supply of Blood?

A. The Superior & inferior mesenteric & the Celiac. with the exception of the Hepatic branch.

Q. Are there anastomotic arcades formed in the branches of the Superior & inferior mesenteric veins as in the Arteries

A. There are

Q. How does the Vena Portarum divide on reaching the transverse fissure of the Liver?

Azygos. Hemi Azygos. Vena Portarum

A. Into two branches which are at right angles with the trunk, but in a line with one another. Constituting the Sinus Portarum.

Q. Into what do the terminating branches Vena Portarum empty?

A. Hepatic veins

Q. Where is the vena azygos situated?

A. In the Posterior Mediastinum, on the right anterior margin of the dorsal vertebra

Q. How does it commence?

A. It commences in the abdomen by anastomosing with the ascending Cava or superior Lumbar vein.

Q. What veins received by it?

A. Ten inferior intercostal veins of the right side, about the 6th vertebra of the back the Hemiazygos empties into it, the Esophageal & Bronchial. it anastomoses at each interovertebral foramen with the veins in the interior of the vertebral Canal.

Q. By what is the Hemiazygos formed?

A. It commences by anastomosing with the left Emulgent or left Superior Lumbar. it receives four or six lower intercostal veins of the left side

Q. Where are the valves first discovered in the veinous system?

Vertebral Veins

Q. What is the number and extent of the vertebral veins?

A. They are two in number and extend from the foramen magnum to the inferior end of the Sacrum.

Q. Are they within sinuses of the brain enclosed in the Dura mater?

A. They are not, they are in front of it.

Q. Do they anastomose with each other?

A. They do at the middle of each vertebra

Q. With what veins do they anastomose externally?

A. Vertebral veins in the transverse processes of the neck. intercostal & lumbar veins they anastomose at their upper end with the Internal Jugular.

Absorbent System

Q. Into what two classes may the absorbent system be divided?

A. Lacteals & Lymphatics.

Q. Is there any anatomical difference between the Lacteals and Lymphatics

A. No particular difference.

Q. In what respects do these vessels resemble the veins?

A. They are superficial and deep seated, their origin is similar. they have valves. formed by the coats

Q. In what respect do they differ from the veins?

A. They pass through glands. Convey a different fluid do not diminish in number & increase in size in their progress like the veins.

Q. What is the external coat?

A. Some say muscular. others cellular.

Q. What is the inner?

A. Serous. the same as veins & arteries.

Q. When & by whom were the Lymphatics first discovered in the human subject?

A. 1650. By Olaus Rudbeck

Q. Is the origin of the Lymphatics clearly demonstrable?

A. It is not.

Lymphatics

Q. In what tissue are they supposed always to exist?
A. The Cellular.
Q. Are the Lymphatics universally found through a gland before they enter the Thoracic duct?
A. Generally. Some exceptions in the lower extremity.
Q. How do they enter the glands?
A. Before they penetrate they radiate into several branches
Q. How do they emerge from the glands?
A. By several branches which afterwards unite.
Q. What are the vessels entering the glands called?
A. Vasa inferentia.
Q. Are the glands supplied with veins arteries & nerves?
A. They are.
Q. Are they more fully developed in early or after life?
A. In early life
Q. Are all the Lymphatics contain the same kind of fluid?
A. They do not those from the skin contain a fluid like bile: from the mamma like milk
Q. Is there any change produced in the fluid while in the glands
A. There is

Ductus Thoracicus

Q. Is it more probable the fluid undergoes an elaboration or that a part of its constituents are separated from it?
A. The latter is more probable.
Q. What then becomes of the part separated?
A. Taken up by the venous Radicles
Q. To the Lymphatic vessels (Thoracic duct excepted) imply into the veins
Q. Those that are in the capillary state may end in the ~~veins~~ veins of the minute structure of the organs but they can be seen emptying into neither else in veins
Q. Into what ducts do all the absorbent vessels terminate?
A. Left Thoracic Duct. Brachio Cephalic duct Right.
Q. Where does the Left Thoracic Duct commence?
A. In front of the body of 2.03 Lumbar Vertebra.
Q. What is the dilitation in it soon after its origin called?
A. Reservoir of Pequet: or Receptaculum Chyli.
Q. What is its relation to the Aorta on entering the Thorax?
A. It is to the right of & behind the aorta
Q. To what height does it rise?
A. As high as the upper margin of 7th Cervicle Vertebra
Q. Over what artery does it pass in turning down?

Absorbent Glands.

A. Left Subclavian.

Q. Where does it terminate?

A. At the junction of the Subclavian and int-Jugular vein.

Q. From what part of the system do the absorbents that make the left Thoracic duct come?

A. Left side of head. neck. superior extremity. Thorax & the viscera of abdomen. and inferior Extremities

Q. When does the right Bracho Cephalic duct empty

A. Junction of the right Int. Jugular & Subclavian.

Q. From what is derived?

A. From Lymphatics of the right side of head, neck, upper extremity & thorax

Q. Are there many absorbent glands below the Knee?

A. Seldom more than one or two.

Q. Where are they situated?

A. In the course of Ant. Tibial artery on upper part of leg.

Q. How many glands called Popliteal. & where situated?

A. 3 or 4 around the Popliteal vessels in fat part of the ~~thigh~~ Ham.

Q. How are the inguinal glands divided?

A. Those internal to the fascia are called Superficial those internal, deep seated.

Absorbents of Legs &c.

Q. What is the number of Superficial Glands?
A. From 10 to 12.
Q. What is the number of Deep seated?
A. 3 to 8.
Q. Are the absorbents more numerous on the internal surface of the Leg?
A. They are.
Q. Where do the Superficial absorbents on the inner side of the leg have their origin?
A. On the dorsum of the foot & toes
Q. Where do those external & posterior arise?
A. On the Sole of the foot.
Q. What is the situation of these last vessels on the thigh?
A. They are on the front surface of the thigh.
Q. How are the deep seated absorbents of the leg arranged?
A. They are near the artery being gerally two each & two or three attending the Saphena vein coming from the outside of the foot.
Q. What is the number & situation of these vessels in the thigh?
A. Usually 4 or 5 attending the Femoral artery
Q. What other absorbents pass through the inguinal glands beside those mentioned?
A. The superficial of Penis & Scrotum & Perinæum (of the female Labia Externa & Clitoris) also of the lower part of the abdomen, Loins & Buttocks.

Glands and Absorbents of Pelvis & Abdomen

Q. What glands in the Pelvis?

A. 6 External Iliac & more internal Iliac glands along the arteries of the same name

Q. How are the absorbents of the Pelvis arranged?

A. Along the arteries of the parts having the same name.

Q. When do the Obturators, Ischiatic, Gluteal, Iliac Lumbar, Sacral & Circumflex Iliac absorbents terminate.

Are the absorbents of the Testicle numerous?

A. They are, Superficial & deep seated.

Q. When do they terminate?

A. In the Lumbar Glands.

Q. Where do the deep absorbents of the Penis terminate

A. In the Internal Iliac glands

Q. When do the absorbents of the Bladder Vagina & Uterus terminate?

A. Internal Iliac Glands.

Q. What are the absorbent glands of the abdomen?

A. Mesenteric, Mesocolic, Gastro-Epiploic, Celiac & Lumbar Glands

Q. What absorbents do the mesenteric receive?

A. Those of the Small Intestines.

Q. Where are the Lumbar & Aortic glands?

A. On each side of the vertebrae from the Sacrum to the Pillars of the Diaphragm.

Absorbents & Glands, Thorax

Q. Have they extensive communications with other Glands?

A. They have, and may be considered as extensive of what of the congeries of glands in the Abdomen.

Q. Where are the absorbents of the Stomach?

A. The superficial are immediately beneath the Peritonial Coat, the profound between the muscular & mucous —

Q. Are there other absorbents of the small intestines besides those which convey Chyle?

A. Those immediately under the peritonial Coat do not convey Chyle.

Q. Are the absorbents of the Liver numerous?

A. They are.

Q. Name the absorbent Glands of the Thorax?

A. There are a few near the heads of the ribs, a few along the Aorta & Esophagus in the posterior Mediastinum. Cor 10 along the internal mammary artery 10 to 20 situated about the bifurcation of the Trachea, called Bronchial

Q. Are there both superficial and deep seat. Absorbents in the Lungs?

A. Yes Sir.

Q. How are the deep absorbents arranged?

A. They observe the course of the Pulmonary vessels & bronchiae. Like they arrive at the bronchial glands.

Abs. Glands of the Thorax &c &c.

Q. Has the heart any absorbent vessels?

A. It has

Q. Where do they terminate?

A. In the Left Thoracic Duct

Q. How do the absorbents of the Oesophagus terminate

A. They pass through the Bronchial glands & take a common termination with those of the Lungs.

Q. Where do the Epigastric terminate?

A. In the External Iliac Glands.

Q. When do the inter costal absorbents terminate?

A. After passing through the small glands at the back of the ribs & those in front of the vertebrae they terminate in the Left Thoracic duct.

Q. Where do the internal Mammary absorbents terminate?

A. Those on the Right in the Right Thoracic duct those on the Left in the Left. T. D.

Q. Through what glands do the superficial absorbents of the Female mamma pass?

A. Axillary Glands

Q. Are there any absorbent in the Cavity of the Cranium?

A. There none.

Q. Name the principal vessels of the Head and Neck?

Abs.ts Glands &c of the Lower Extremity

A. On the face are a few below the Zygoma, 4 or 5 about the Parotid gland. 2 or 3 under the symphysis of the Jaw, 8 or 10 around the submaxillary glands about 20 along the Sterno mastoid muscle. 6 or 8 along superior margin of the Clavicle.

Q Do absorbents have been seen in the meninges of the Brain?

A They have.

Q Where are the glands of the superior Extremity

A. There are a few sometimes along the course of the deep absorbents of the forearm, 3 or 4 in front of the elbow, 4 to 7 along the sheaths of the vessels of the arm & 20 to 40 in the axilla

Q Are the superficial of the upper Extremities very ~~[illegible]~~ numerous?

A They are.

Q How are the deep ones arranged?

A. They attend the arteries passing up to the axillary glands.

Q Are the superficial lymphatics of contiguous parts, as from the neck to the joints which converge to the axillary glands, so numerous as those of the upper Extremity?

A They are not

Ear

Q. Where is the organ of hearing situated?
A. On the Petrous portion of the Temporal bone
Q. Into what three portions is the Ear divided
A. The external, Tympanum & Labyrinth
Q. Into what two is the external divided?
A. The auricle & meatus auditorius Ext.
Q. Into what five is the Auricle divided?
A. Pinna & Lobus
Q. Where is the Concha situated?
A. It is that deep depression near middle of the Auricle
Q. Where is the Tragus?
A. An elevation of the Pinna placed in front of the Concha
Q. What is that scroll on the circumference of the Pinna called?
A. Helix.
Q. Where is the Anti-Helix?
A. That slightly curved vertical eminence near the middle of the Pinna forming the upper & posterior boundry of the Concha
Q. What is the depression between the bifurcation of the upper part of the Helix.
A. Scaphe.
Q. Where is the Lobus situated?
A. That soft pendulous portion situated at the inferior posterior part of Pinna

Muscles of the External Ear

Q. By what is the external ear united to the side of the head?
A. By three ligaments are Anterior, posterior & superior.
Q. How are the muscles of the ear divided?
A. Extrinsic & Intrinsic.
Q. What are the dimensions of the meatus Auditorius externus?
A. About 1 inch in length three lines in diameter through somewhat smaller in the middle than at its extremities
Q. By what is it formed
A. The exterior half by the cartilage of the pinna. The internal half by the Temporal bone
Q. By what is it bounded inwardly
A. Membrana Tympani
Q. By what is this canal lined
A. A continuation of the skin from the concha
Q. What are those small white bodies called which are chiefly situated beneath the skin when the cartilaginous deficiency in the exterior half of the canal is occupied by a fibrous structure
A. Glandulæ Ceruminosæ.

Tympanum.

Q What is the use of the secretions from these glands.
A To direct insects attend extreme sound and lubricate the cavity
Q Where is the Tympanum
A Between the meatus auditorius and the labyrinth.
Q What are the dimensions of the Tympanum
A Its depth about three lines its entire posterior diameter about six its vertical diameter eight or nine
Q What is the membrana Tympani
A A complete membranous septum between the meatus externus and Tympanum
Q Is it placed vertical
A It is placed obliquely with the upper edge inclining outwards, the under inwards
Q In the middle of the side of the Tympanum next the Labyrinth is an elevation what is it called?
A. Promontory of the Tympanum
Q What foramen just above the superior margin of the Promontory?
A Foramen Ovale.
Q What at the Posterior Superior part?
A. Foramen Rotundum

Ear

Q. To what does it lead to?
A. Cochlea.
Q. Where is the Eminentia Pyramidalis?
A. A small conical eminence projecting from the posterior part of the tympanum. It is hollow and contains a muscle
Q. At what part of the tympanum is the orifice of communication between it and the mastoid cells
A. At the superior posterior part
Q. Have these mastoid cells any lining membrane
A. They have which is a continuation of the lining membrane of the tympanum.
Q. The orifice of what tube is it situated at the fore part of the tympanum
A. Eustachian tube
Q. How is it formed
A. A portion of it by the petrous bone a portion is cartilaginous and a portion membraneous
Q. With what does this tube communicate
A. The Pharynx
Q. What is the length of this tube

Ear

A About two inches
Q By what is it lined
A Mucous membrane
Q What foramen is there on the outer side of the orifice Eustachian tube
A Glenoid foramen by which it communicates with the Glenoid cavity
Q How many and what are those bones called which are in the tympanum
A There are four the malleus Incus Orbicular and Stapes
Q Give the situation of the ends of the chain formed by these bones
A One end is fastened to the membrana tympani the other rests upon the foramen ovale
Q This chain of bones is moved by several muscles what are they called
A Laxator Tympani, Tensor tympani and the Stapedius
Q Of what is the lining membrane of the Tympanum a continuation
A Of the lining membrane of the Pharynx
Q Of what does the bony Labyrinth consist
A Of three portions the vestibulum semicircular canals and cochlea

Ear

Q. There are two fossa in the vestibulum what are they called
A. Fossa Elliptica and Fossa Hemisperica
Q. How many orifices in the vestibulum
A. Eight Q. What are they
A. Five at the posterior part leading into the semicircular canals
one anteriorly leading into the upper scala of the cochlea the fenestra ovale which opens into the tympanum and the aqueduct of the vestibule
Q. What is the number of semicircular canals
A. Three
Q. What are they called
A. Superior inferior and external
Q. What part of a circle does each form
A. About one third
Q. How is it that only five orifices are formed by these three canals
A. It is by the union of one extremity of the superior and inferior canals
Q. What is the diameter of the cavity of one of these canals
A. About half a line though enlarged at their origin

Ear

Q Has the internal face of the bony Labyrinth any lining
A It lined by a delicate and vascular membrane.
Q What is contained in the bony canal
A There is a membranous labyrinth consisting in three semicircular canal nearly filling up the cavities and having the same shape and general arrangement
Q Where do the orifices of these canals open
A In a sac at the superior part of the vestibule
Q What is that sac called
A Sacculus ellipticus
Q Situated in the vestibule in front of the sacculus ellipticus is another sac what is it called
A Sacculus Sphericus
Q What is contained in these sacs and the membranous canals
A A very fluid transparent liquid called by some nitrine auditive also in each sac is a small mass of white calcareous powder otolites or otoconia according as they are hard or soft

Ear.

Q What is that fluid called which is contained in the cochlea bony vestibule and bony semicircular canals
A Liquor or Lymph of Cotunnius
Q What does the cochlea resemble
A The shell of a snail
Q How is it formed
A A conoidal tube wound twice and a half round a column of bone called Modiolus
Q What is that plate called which divides it in its length into two compartments an inferior & superior
A Lamina Spiralis
Q What are these two compartments called
A The inferior is called Scala Tympani the superior Scala vestibule
Q How has the Septum of the cochlea been divided
A Into four portions and called according to their structure
Q What are the names of these different portions

Ear

A Zona Ossea Zona Cartilagi Zona vesicularis and Zonas Membranaceas

Q What is the cribriform arrangement of the modiolus called

A Fractus Spiralis Foraminulosus

Q What are the supposed aqueducts of the ear called

A Aqueducts of Cotunnius or the aqueducts of the vestibulum and aqueduct of the cochlea.

Eye.

By what is the organ of vision formed?
A. By the ball of the Eye, Eye brows, Eye lids, Lachrymal apparatus, muscles, and Tunica Conjunctiva.
Q. What are the uses of the Eye brows?
A. They can protect the eye from too much light, & from the perspiration.
Q. What are the uses of the eyelids?
A. They shut out the light, preserve it from contact with extraneous bodies during sleep, & remove extraneous particles from the eyeball by their motion.
Q. Of what are they formed?
A. Skin, muscular fibres, Cartilage, Cellular & fibrous tissue.
Q. By what is the internal Canthus attached to nasal process of the superior maxillary bone
A. Ligamentum Palpebrale Internum.
Q. To what is the Ext Canthus united by the Ext ligament?
A. To the External margin of the orbit.
Q. What muscles enter into the Composition of the Eye lids?
A. Orbicularis Palpebrarum. Levator Palpebræ Superioris.
Q. Where are the Palpebral Cartilages?
A. One at the margin of each eye lid, &c

Eye

Q. Give the figure of these Cartilages or Tarsi
A. Upper is of a Semi Lunar form, ¼ inch broad in the middle, the lower not exceeding 2 lines in breadth.
Q. How they reach each Canthus?
A. No they terminate in the Ligaments.
Q. What is the internal lining of the eye lid called
A. Tunica Conjunctiva
Q. Give its arrangement?
A. It covers the inner face of the upper eye-lid, it is reflected for 8 or 10 lines towards the bottom of the orbit, then passes over the front of the eyeball, & lines the inner face of the lower lid
Q. Is it very closely connected with the Cornea?
A. It is.
Q. What kind of a membrane is it?
A. Supposed to be mucous.
Q. Where are the Glands of Meibomius?
A. At the margin of each lid between its Cartilages & Conjunctiva
Q. What is the use of the secretion from them?
A. For preventing the overflowing of the tears & to lubricate the eyelids

Ques.

Q. How many muscles move the eyeball?
A. Six. 4 Rectus - 2 Oblique
Q. From what point do they all arise, except the inferior oblique?
A. From the bottom of the Orbit.
Q. Give the insertion of the Rectus Oculi Sup.
A. Into the Sclerotica two lines from the Cornea
Q. Give the insertion of the Rectus Oculi Ext.
A. Into the Sclerotica 2 or 3 lines from the Cornea
Q. Where is the Obliquus Oculi Superior inserted?
A. Into the Sclerotica on the upper part near the middle, it draws the eye forward and toward the Internal Canthus.
Q. Give the Origin & Insertion of Obliquus Inf.?
A. Rises from the Superior Maxillary - Inst in to outer face of the Sclerotica -
Q. Of what use the apparatus for the Lacrymal Conduct?
A. Lachrymal Gland, ducts & absorbents.
Q. Where is the Lachrymal Gland
A. Immediately below and within the ext angular Process of os frontis
Q. How many lachrymal ducts?
A. Four forming a row about ½ inch in length.

Eye.

Q When are the Lachrymal Ducts?
A. At the internal Commissure
Q What is the beginning of the duct called?
A Punctum Lachrymale.
Q into what do the ducts open?
A Lachrymal Sac
Q What is that small red tubercle at the internal junction of the Eyelids?
A Lachrymal Caruncle.
Q What is the Plica Semilunaris?
A Duplication of the Conjunctiva at the margin of Caruncle.
Q When is the Lachrymal Sac?
A. At the internal Canthus of the orbit in the depression of os unguis & Sup. Maxillary bones.
Q What part of the Eyeball does the Sclerotica coat?
A. About 5/6 of the exterior investment.
Q When is the hole the optic nerve.
A At the posterior part a little within the Cutis.
Q. When is the deficiency in the Sclerotica?
A. At the anterior; which filled by the Cornea.
Q For what is the Sclerotica remarkable?
A. Strength & want of elasticity
Q By what is the Sclerotica formed?
A. By a continuation of the Tunica Arach

Eye

wor dea.

Q. Does the cornea represent a segment of a sphere the same as that of the sclerotica?

A. No. of a smaller.

Q. How is the junction of the cornea & sclerotica

A. They each have a sloping margin.

Q. Where is the choroid coat?

A. Immediately within the sclerotic.

Q. By what is its anterior opening bounded?

A. The ciliary ligament and Iris

Q. What is the ciliary process?

A. Behind the Iris and within the ciliary ligament an a great number of folds or radiated ridges called ciliary processes

Q. What is that black substance called that is spread over the choroid?

A. Pigmentum Nigrum

Q. Is the choroid coat very dense & resisting?

A. It is easily lacerated.

Q. Is it very vascular?

A. It is

Q. What is the Iris?

A. Circular plane placed in the deficiency in the front of the choroid. having in the center a round opening called the pupil

Q. What is the posterior face of the Iris called

A. Uvea.

Eye.

Q. Upon what does the color of the depend?
A. On the color of the image. Its deficiency is the cause of blackness.
Q. What is the third coat of the Eye?
A. Retina.
Q. Does it adhere to the choroid coat?
A. It does not.
Q. What part of the eyeball is occupied by the Vitreous humour?
A. Nearly whole posterior to Iris.
Q. With what is it in contact?
A. The Retina for the greater part in front the crystaline humour & Ciliary body.
Q. What encloses the vitreous humor?
A. The Hyaloid Membrane & thin fluid.
Q. What is the arrangement on the internal surface of the tunica Hyaloidea?
A. There proceeds from the internal surface a great many partitions dividing the whole cavity into cells of various shapes & sizes.
Q. Where is the Crystaline lens or humour?
A. In a depression in the front of the Vitreous behind the Iris.
Q. What is its shape?
A. A double convex lens.
Q. Which convexity is the greater?
A. Posterior.

Eye.

Q What is meant by the Canal of Petit?
A. When the tunica Hyaloidea has reached near the circumference of the Chrystaline lens it separates into two Lamina which afterwards unite at the circumference the space between the two Lamina is called the Canal of Petit.
Q Has the Chrystaline Lens a proper Capsule?
A It has
Q Is its consistence the same throughout?
A. Firmest more solid in the middle
Q What do you call the transparent fluid immediately within the Capsule?
A Liquor of Morgagni.
Q What part does the aqueous humor occupy?
A Anterior to the Chrystaline lens and posterior to the Cornea.
Q Has it a Capsule?
A It has but perhaps not complete.
Q Will the fluid be produced if lost by an operation
A It will rapidly.
Q What is meant by the Chambers?
A. The division of the eye made by the Iris embracing the part occupied by the aqueous humor, viz. Ant. & Post. Chamber

The Brain Membranes of

Q By what membranes are the Brain and Spinal marrow invested?
A Dura Mater, Arachnoid, Pia Mater.
Q What is the appearance of the external surface of the dura Mater.
A It is rough and uneven
Q Does it adhere to the Cranial bone?
A It does early in life or in very old age
Q Does it consist of one or two laminæ?
A. Two. but they are very closely united
Q By what is the Falx Cerebri formed:
A. By a duplication of the internal lamina of the dura mater.
Q Give its bony attachment,
A It commences about the middle of the body of the Sphenoid bone. it rises above the crista galli. spine & middle line frontal bone, the sagittal suture & upper line occipital cross to the internal occipital protuberance.
Q What is its breadth?
A. About inch in front, increased to 2 1/2 at the posterior part.
Q What can you say of its inferior margin?
A It is very concave

Membranes of the Brain.

Q By what is the Tentorium formed?
A. An internal layer of the dura mater,
Q What is the extent of the outer ~~surface~~ circumference?
A. Extends along the horizontal limb of the occipital cross & along superior corner petrous bone to the posterior clinoid process.
Q What is it, we separates the posterior lobes of Cerebrum from the Cerebellum
Q what is the opening in the internal margin called?
A Foramen Ovale.
Q What is the extent of the Falx Cerebelli?
A. It extends along the middle line to the posterior margin of occipital foramen from the under surface of the Tentorium.
Q. What is the structure of the Dura mater?
A Fibrous.
Q. What gives the internal surface its smooth appearance?
A The Pelitus from the Tunica Aracnoidea.
Q Are any blood vessels ramify in it?
A. It will supplied with arteries & veins.
Q How are the sinuses formed.
A By a separation of the Dura Mater.

Sinuses of the Brain

Q. Give the situation of the Superior Longitudinal Sinus?
A. In the base of the falx Cerebri.
Q. At what joints & with what does it communicate?
A. It begins at the foramen Cecum by a small vein which passes from the nose.
Q. What blood vessels does it receive?
A. On each side it receives ten or twelve large veins from the Pia Mater, also veins from the bones & scalp & dura mater.
Q. Where are the lateral sinuses?
A. One on each side at the base of the Tentorium
Q — the inferior Longitudinal?
A. In the falx Cerebri just above its concave edge.
Q. Where is the Sinus Quartus or Rectus?
A. In the tentorium where it joins the falx Cerebri running from the anterior to the posterior margin of the tentorium.
Q. What is the general union of the Longitudinal Quartus, & lateral Sinuses at the posterior part Tentorium called?
A. Torcular Herophilii
Q. How many Petrous Sinuses?
A. Two on either side.
Q. With what other sinuses are they connected?

Pia Mater of the brain &c. Of Spine

Q. They arise from the Cavernous & terminate in the lateral.

Q. Where are the Cavernous sinuses?

A. On each side of the sella Tercica.

Q. What artery & nerve traverse this sinus?

A. The internal Carotid & sixth nerve.

Q. Where is the Circular sinus?

A. In the sella Tercica. surrounding the Pituitary Gland.

Q. With what sinus does it communicate.

A. The Cavernous.

Q. What is the Tunica Arachnoidea.

A. A serous sac, lining the internal surface of the dura Mater. and the external of the Pia mater.

Q. What is the structure of the Pia Mater?

A. It is a network of arteries and veins. the Interstices are filled by a loose areolar cellular tissue.

Q. Is it closely applied to the brain?

A. It is.

Q. Is the dura mater of the spine attached to the bones?

A. Only at first.

Q. Is the arrangement of the Tunica Arachnoidea of the Spinal Column the same as of the Brain

A. It is Principally

Substance of the Brain &c

Q. What is the structure of the ~~tracheoid~~ Pia mater of the Spinal Column?

A. Fibrous

Q. What are the two kinds of substance composing the central portions of the nervous system called?

A. The Gray or cortical, & the white or medullary.

Q. How are these substances placed in the central portions of the nervous system?

A. The surface of the Cerebrum & Cerebellum is formed by the gray or cinericous, the interior of the white substance. The surface of the Pons, Crura, and Spinal marrow is the white substance the gray is interior.

Q. What is the internal structure of these substances?

A. Fibrous

Q. Which proceeds in development the Brain or Spinal marrow?

A. Spinal Marrow

Q. What is the extent of the medulla Spinalis

A. From the Foramen magnum to the first or second Lumbar vertebra.

Q. What is the form of the Medulla Spinalis?

A. Generally Cylindrical.

Q. By what is the Spinal marrow kept in its place?

Bulbs of the Spine

A. By the nerves passing off from it, 2 by a process sent down from the inferior extremity of the Pia mater to be attached to the dura mater at the lower part, by the Ligamenta denticulata.

Q. What are the Ligamenta denticulata?

A. Narrow thin bands are placed on either side of the medulla Spinalis, commencing at the occipital foramen, descending between the anth & post. roots of the nerves, & near the termination of the medulla Spinalis.

Q. To what do they adhere by their internal margin?

A. Pia Mater.

Q. What do you understand by the cervical or brachial bulb?

A. An enlargement of the medulla Spinalis along the five lower cervical vertebrae where the roots of the axillary plexus of nerves arise.

Q. Where is the crural bulb?

A. An enlargement of the medulla Spinalis 3 or 4 inches above its termination.

From it the Lumbar & part of the sacral nerves proceed.

Q. What do you observe on the front surface of the Medulla Spinalis

Q.
What are of the Spine &c.
A. A longitudinal anterior fissure which divides the front surface into two symmetrical halves
Q. What on the posterior?
A. A deeper fissure corresponding with the former called posterior or dorsal.
Q. What is the anterior commissure?
A. A serrated commission at the bottom of the anterior fissure.
Q. What is the arrangement of the fibres of the posterior commissure?
A. They are serrated but run longitudinally.
Q. What is observed on the lateral surface?
A. A fissure the situation of which is marked by a line of white substance.
Q. What number of nerves attached to the spinal marrow?
A. 30 pairs.
Q. How are the nerves connected with the spine
A. By two roots an ant. & post. they separately perforate the dura mater. afterwards the post. roots form a ganglion the roots then unite.
Q. What is the situation of Medulla oblongata?
A. Extends from foramen magnum to the middle of the basilar process occipitis.
Q. What other portions is it continuous?
A. Medulla Spinalis, Pons Varolii, & Crura Cerebelli.

Oblongata. Pyramidalia. Olivares. Restiformia.

Q. What is its form?

A. Somewhat conical, about one inch long—

Q. On the ant. or inf. surface is a fissure the continuation of the ant. spinal fissure what are those eminences on either side?

A. Corpora Pyramidalia

Q. By what is the ant. spinal fissure interrupted in the first cervical vertebra?

A. By a decussation of the fibres of the anterior column of spinal marrow.

Q. Of what are the Corpora Pyramidalia a continuation?

A. Ant. columns of the spine.

Q. What are the Corpora Olivares

A. Two bodies on the ext. margin of the Corpora Pyramidalia

Q. Where are the Corpora Restiformia?

A. At the lateral post. margins of the medulla oblongata, just post. to Corpora Olivaris—

Q. By what are they separated from each other

A. By the Post. fissure medulla oblongata

Q. Of what are they a continuation?

A. Post. cords of medulla spinalis

Q. Where is the Calamus Scriptorius?

A. On the oblongata between the Corpora Restiformia?

Pons: Cerebellum.

Q. Where is the protuberantia annularis or Pons ~~Varolii~~ varolii?

A. Near the centre of the base of the encephalon at the top of the medulla oblongata.

Q. How is its under surface formed?

A. Of transverse medullary fibres coming from the crura Cerebelli

Q. What is that which passes through this body & continued on so as to form the under surface of the crura Cerebrum?

A. Corpora Pyramidalia.

Q. Where is the Cerebellum?

A. In the Posterior fossa of the cranium. & separated from the Cerebrum by the tentorium.

Q. What is its shape and size?

A. It is rounded. convex above & below, 4 inches transversely. 2½ antero posteriorly. 2 thick —

Q. On the superior surface along the median line what is it called?

A. Vermis superior

Q. When is the sulcus inferior cerebelli?

A. On the inferior surface Cerebellum.

Q. What ridge in this sulcus?

A. Superior vermis

Q. What is the central portion of the cerebellum formed by the sup. & inf. vermis called?

A. Fundamentum or Torcular.

Cerebellum. Arteries of the Brain

Q. Into what number of classes are the sulci of the cerebellum arranged?

A. 4.

Q. What are the portions separated by each class?

A. 1. into lobes. 2 into lobules. 3 into Lamina 4. into Lamellæ.

Q. What is the appearance of the Cerebellum when laid open by an incision?

A. Has the appearance of Arbor Vitæ

Q. What is that oblong rounded body in the middle of the trunk of the arbor vitæ?

A. The ganglion of the Cerebellum or Corpus Rhomboideum.

Q. Where the testes and Nates?

A. The roots of the Crus Cerebelli

Q. Where is the valve of Vieussens?

A. Between the Crura Cerebelli, commencing at mortiesley & ending at the Testes.

Q. What ~~two~~ arteries supply the brain with blood

A. Internal Carotid & Vertebral

Q. Through what foramen does the vertebral artery get in the Cranium?

A. Foramen Magnum.

Q. At point point do the vertebral arteries unite

A. At the posterior margin of the pons Varolii, & for the basilar artery.

Arteries of the Brain

Q What branches given off from the vertebral within the Cranium?

A An Ant. & Post. branch sent down to the spine and the inferior Cerebellic artery. distributed to the under surface of the Cerebellum principally.

Q How far does the basilar artery extend?

A From the Pons to Ant. margin of Pons Varolii

Q What arteries given off at the ant. extremity?

A Superior of the Cerebellum, & Post. of the Cerebrum.

Q What artery does the Post. artery the Cerebrum receive?

A Communicans posterior of the internal Carotid

Q Through what does the Internal Carotid pass to get into the Cranium?

A Carotid Canal of the Temporal bone.

Q What branch given off from it near ant. clinoid process?

A The Opthalmic artery.

Q Which is most important of trunk?

A. Arteria Communicans Posterior.

Q Of what is the arteria Callosa a branch?

A Of the Internal Carotid

Q What is the continuation of the Internal Carotid called after these branches?

A Arteria Media Cerebri.

Cerebrum. Crura &c

Q. Along what does it run and on what spent
A. Along the fissure of Sylvius and spent upon the adjacent parts.
Q. What is meant by the Circle of Willis?
A. Arterial Circle surround the chiasm of the optic nerves.
Q. Into what is the cerebrum separated by the longitudinal fissure?
A. Hemispheres (two)
Q. What is there at the bottom of this fissure?
A. Corpus Callosum.
Q. How is the under surface of each hemisphere divided?
A. Into Ant. Post. & middle lobes.
Q. By what is the Ant. & middle separated?
A. Fissure of Sylvius.
Q. Is the division of the middle & Post indicated by a fissure?
A. It is not.
Q. Cerebrum is formed by the expansion of what?
A. Crura Cerebri
Q. What is the length & breadth Crura Cerebri
A. 3/4 inch long 1/2 inch wide.
Q. What fissure between the Crura?
A. The Third ventricle

Infundibulum. Ventricles

Q What are those small eminences, situated near the anterior extremity of the Crura?

A. Eminentia Mamillaris, or Corpora Albicantia.

Q What is that conoidal process immediately in front of the last named eminences?

A. Infundibulum, attached to the Pituitary Gland.

Q Where is the Pituitary gland?

A. In the Sella Turcica.

Q When is the Tuber Cinereum?

A. A portion of the crura cerebri at the floor of the third ventricle.

Q Where do the optic nerves unite?

A. In front of the Infundibulum

Q Of does each lateral ventricle consist?

A Of a body and 3 processes called Cornua

Q By what are they separated from each other

A Septum Lucidum

Q What is the extent of the Septum?

A. From the Corpus Callosum to the Fornix.

Q What is the separation between the lamina called?

A 5th Ventricle.

Q Which forms the floor of the Lateral Ventricles?

A. Corpus Callosum

Callosum. Fornix. Thalami Optici.

Q. What is the Corpus Callosum?

A. A medullary layer uniting the 2 hemispheres it occupies 2/5 of the long diameter of the brain, convex above & concave below

Q. How does the anterior extremity terminate?

A. Bent down embracing Corpora Striata.

Q. With what is post. extremity continuous

A. The Fornix & Cornu Ammonis.

Q. What forms the floor of the lateral ventricle?

A. Fornix Thalami Optici. & Corpora Striata.

Q. With what is the Fornix continuous posteriorly?

A. Corpus Callosum.

Q. What do the posterior angles of the fornix form?

A. Cornu Ammonis.

Q. Where the Thalami Optici. or the Posterior Ganglia?

A. On the superior face of the Crura Cerebri

Q. What is their size?

A. 1½ inches long. 3/4 wide. and the same thickness

Q. At the junction of the Sup. & Inf. surface is a prominent ridge what called?

A. Peduncle of the Pineal Gland.

Corpora Striata. Cornua of L. Vent.

Q. When are the Corpora Striata?

A. Situated in front of, & nearly surrounding the Thalami Optici by the divergence of their first extremity.

Q. What is the composition of the Corpora Striata?

A. Surface is of the cinereous substance within it consists of alternate layers of cinereous and medullary matter.

Q. What are the Cornua of the lateral ventricle called?

A. Ant. Post. & Lateral

Q. What is the oblong eminence on the internal side of the Post. Cornu?

A. Hippocampus minor

Q. What elevated ridge on the floor of the lateral cornu extending its whole length?

A. Cornu Ammonis. Hippocampus Major

Q. Where is the velum Interpositum?

A. ~~It extends the anterior portion of Septa Lucida, goes forward through the Foramen Sinuosum, and ends to the pituitary Infundibulum.~~

A. Between the Fornix & Optic Thalami.

Q. In what do the vessels constituting Plexus Choroides terminate?

A. Two veins. Called Vena Galeni.

Ventricles & Pineal Gland

Q. What ventricle brought to view by removing the Velum Interpositum?

A. 3rd

Q. What forms its floor?

A. Tubercinerium, Crura Cerebri, & Eminentiæ mammillares.

Q. What at its Posterior?

A. Anterior Crura of Fornix.

Q. What in front the Crura Fornix?

A. Anterior Commissure

Q. What then opening into the 3rd Vent. just below the Ant. Commissure?

A. The base of the Infundibulum

Q. What forms the means of communication with the 4th Ventricle?

A. The aqueduct of Sylvius.

Q. Where is the Pineal Gland.

A. Beneath the posterior margin of the Fornix on the sup. part of Tubercula Quadrigemina

Q. What is generally found in the Pineal gland?

A. An accumulation of Calcareous matter

Q. From the continuation & expansion of what part of the medulla oblongata is the Cerebrum formed?

A. Corpora pyramidalia & Olivares

Olfactory

Q. By what is the Cerebellum formed?
A. Corpora Pontis formia.
Q. What division made of the fibres of centrum?
A. Converging and diverging
Q. How are the convolutions of the brain formed
A. A convolution is formed by fibres of an equal length.

Nerves.

Q. How many cranial nerves are generally reckoned?
A. Nine Pairs.
Q. What is the first pair?
A. ~~Olfactory~~ Olfactory
Q. Describe its origin?
A. It rises by three medullary roots from the post. convolution of the anterior lobe.
Q. What is the situation of this nerve?
A. On the under surface of the anterior lobe of the brain near the fissure which separates the hemispheres it is lodged in a small furrow of the Cerebrum.
Q. Do these nerves converge in their course?
Yes gradually.
Through what does it pass out?
The perforation of the cribriform plate of the Ethmoid bone.

Ophthalmic. Motor Oculi.

Q. Upon what is spent?
A. Principally on the Pituitary ~~gland~~ membrane.
Q. Give the origin of the optic nerve?
A. Arises by a flattened root, one portion coming from the geniculatum externum, the other from the testes by a medullary band
Q. What then is its course?
A. It winds forwards under the crus cerebri adhering to it & the tuber cinereum then inclines inwards towards its fellow
At what point do they unite?
At the under ant. part of the third ventricle just anterior to the infundibulum.
Is there a partial or total decussation of its fibres?
There is a decussation of the internal fibres only
Q. Through what foramen does it pass?
A. Foramen optica
Q. What is then formed by it?
A. The Retina or the organ of vision.
Q. What is the third pair?
A. Nervus motor oculi.
Q. Give the origin?
A. From the internal face of the crus cerebri. just in front of the anterior margin of the Tuber annulare.

2 Pathetic. Trigeminus

Q Through what does it pass from the Cranium

A Sphenoidal Foramen.

Q What is the first branch sent?

A. The Rectus Superior muscle of the Eye

Q. After giving off this what is the distribution of this nerve?

A It divides into 3 branches; distributed to the some of the muscles of the eye.

Q What is the fourth pair?

A The pathetic nerve

Q Give its origin?

A Rises by two filaments from the upper surface of the valve of Vieussens.

Q Through what foramen does it pass out?

A Sphenoidal foramen. Spent on the Superior oblique muscle of the Eye

Q What is the 5th pair?

A Trigeminus or Trifacial

Q How does arise?

A By two roots. One is larger than the other, it arises from Corpora Olivaria & the fissure between it & Corpora Pyramidalia.

Q Through what does it pass?

A Foris Varolii

Q Into what is this root converted at the lower part of the canal of the dura mater which it traverses

A Into a semilunar Ganglion called the Gasg

Branches of the Fifth Pair

lion of Gasser.

Q From what does the other root of the 5th pair arise?

A. Corpora Restiformia. Medulla Oblongata

Q What are its 3 principal trunks?

A. Opthalmic, Superior maxillary, inferior maxillary.

Q Through what does the Opthalmic pass out?

A. Sphenoidal Fissure

Q But what does divide while in the fissure

A Nasal. Lachrymal & Frontal.

Q What is the situation of the nasal in the orbit?

A. It gets to the internal face of the orbit & passes forward just below the superior oblique muscle involved in adipose matter

Q It gives of a branch soon after its origin what is it called?

A. Ramus Ciliaris

Q Of what ganglion does the Ramus ciliaris form the principal root.

A Senticular or Opthalmic

Q The nasal nerve gives off a branch at the anterior internal orbitar foramen what is it called?

A Internal nasal or Ethmoidal branch

Branches of Trigeminus 5th.

Q. Which is the largest branch of the Opthalmic?

A. Frontal.

Q. How does it divide?

A. It does into Internal & External branches

Q. Upon what is the internal branch spent?

A. It detaches a branch to join the nasal nerve - it gives filaments to upper eyelid and is spent upon the muscles of the forehead.

Q. Give the distribution of the external branch;

A. Passes through the Supra Orbitar foramen, gives off a branch to anastomose with the facial is spent upon the Occipito Frontalis Corrugator & integuments of the forehead.

Q. How is the Lachrymal spent?

A. After sending off a number filaments is spent on the Lachrymal Gland.

Q. What is the second branch of the Trigeminal?

A. Superior maxillary.

Q. Through what does it pass from the Cranium?

A. Foramen Rotundum.

Q. Soon after it gets out what filaments does it give off?

A. Nervus Subcutaneus malaer.

Q. What is the course of this nerve?

A. Ascends through the Spheno maxillary Fossa

Branches of Superior Maxillary.

it then divides.

Q What are the branches formed by the division called?

A Two; called malar, orbital; Temporal.

Q after giving off these branches the Sup. Maxillary divides into what two branches?

A. Infra Orbital. Pterygo Palatine.

Q Of what is the Posterior Dental a branch?

A. Infra Orbital it gives off likewise the Anterior dental while in the infra Orbital Canal

Q What is formed by the Spheno Palatine nerve just outside of the Spheno Palatine foramen?

A The ganglion of Meckel

Q Upon what is the Spheno Palatine branches spent which rise from the Ganglion?

A The Pituitary membrane.

Q Give origin & course of the Vidian nerve.

A It comes from the inferior part of the ganglion of Meckel and goes backwards through the Pterygoid foramen it sends some filaments to the mucous membrane about the Eustachian tube.

Q It then divides into what?

A Superficial & deep seated Petrosal

Q Through what foramen does the superficial Petrosal pass?

A The Vidian.

Inferior Maxillary: & 6th Pair.

Q To what nerve does it adhere in the aqueduct of Fallopius?

A Facial or Portio Dura

Q By what name is it known while traversing the Tympanum?

A Chordea Tympani

Q What nerve does it then join?

A The Lingual of the fifth

Q The anastomosing of the deep seated Petrous with some filaments of the 6th on the Internal Carotid forms what?

A The beginning of the Great Sympathetic.

Q Through what does the inferior maxillary emerge from the Cranium?

A. Foramen Ovale of the Sphenoid bone

Q Through what notch does the masseter nerve pass?

A The Sigmoid notch.

Q Upon what are the two deep seated Temporal nerves distributed?

A Temporal muscle.

Q Name the branches of the Inferior maxillary?

A. Buccal, Pterygoid, Superficial Temporal inferior dental, & Lingual.

Q Give the origin of the 6th Pair of nerves?

A Rises from the upper extremity of the Corpus Pyramidale

6th & 7th Pair

Q. Through what sinus does it pass?
A. Cavernous
Q. Through what fissure does it enter the orbit?
A. Sphenoid
Q. Upon what expanded?
A. Rectus External of the Eye
Q. What two nerves compose the 7th pair?
A. Facial & auditory.
Q. Give the origin of the auditory?
A. From Calamus Scriptorius, & Corpus restiform
Q. Give its course & distribution
A. Forwards & outwards beneath the pons cerebri penetrates into the meatus auditorius internus on which it is expanded.
Q. Give the origin of the facial nerve?
A. From superior part of Corpus Restiform & the space between it & Calamus Scriptorius.
Q. Through what canal does it pass?
A. The Aqueduct of Fallopius
Q. Through what foramen does it escape?
A. Stylo Mastoid.
Q. What branch given off near this foramen
A. Posterior Auricular
Q. Through what gland does it pass?
A. The Parotid.

Facial. Gloso. Pharangeal. Sympathetic

Q What then is the distribution of the Facial?

A. To the side of the face in Radiating Clusters called the Temporo-facial; Buccal; Cervico facial

Q Give the Gloso Pharangeal?

A. From the Corpora Restiformia.

Q. Does it anastomose with the Pneumogastric while in the Cranium?

A It does by a large branch

Q Through what foramen does it pass?

A Foramen Lacerum posterius

Q A ganglion is formed by it while in the cranium what branches given off from it?

A A branch is given off which penetrates into the tympanum and divides, one branch of the division joins the superficial petrous nerve, the other anastomoses with the sympathetic which is called the anastomoses of Jacobson

Q Give the course and distribution of this nerve after leaving the cranium?

A It goes downwards and forwards between the internal carotid artery & Stylo pharyngeus muscle there between the latter and the Stylo glossus it

(Accessory) nerve of Willis & Par vagum follows the direction of the latter to the side of the root of the tongue it is spent upon the pharynx and mucous membrane of the tongue but forms numerous anastomoses

Q Give the origin of the accessory nerve of Willis?

A It arises from the medulla spinalis commonly as low as the seventh cervical nerve It comes from between the anterior & posterior columns

Q It passes up into the cranium along the medulla spinalis ~~commonly as low~~ and medulla oblongata Through what foramen does it leave the cranium?

A Foramen Lacerum posterius

Q With what nerve does it pair anastomose?

A The par vagum

Q Upon what distributed?

A Principally on the sterno cleido mastoid and Trapezius muscles

Q Give the origin of the Pneumogastric nerve? Index 17 ~~[illegible]~~

A It arises from the corpus restiforme

Q Through what foramen pass?

Pneumogastric. Pharangeal

Q Foramen Lacerum posterius in front of the internal Jugular vein

Q Within the sheath of what artery & vein does it pass down the neck?

A Internal Carotid and internal jugular

Q What artery does it cross on the right and what on the left side?

A On the right side it crosses the subclavian and on the left the arch of the aorta

What then is its course?

A In getting into the cavity of the thorax it goes downwards and backwards towards the posterior face of the bronchus is then applies itself to the Œsophagus and follows it to the stomach

Q The superior Pharyngeal comes from the Pneumogastric shortly after emerging from the cranium upon what is it spent?

A Upon the middle and superior constrictors of the Pharynx

Q The next branch is the superior Laryngeal upon what is it spent?

A It anastomoses with the superior cervical ganglion pharyngeal ~~and~~ plexus and hypoglossal nerve it is then spent upon the Larynx and thyroid gland and the pharynx

Nerves of Lungs Oesophagus &c

Q What are the next branches of the Pneumogastric called?

A Cardiac They descend with the arteries to the cardiac plexus

Q Around what artery does the Inferior Laryngeal or Recurrent nerve pass?

A. The subclavian on the right & Aorta on the left

Q Give its distribution?

A. It sends branches to the cardiac plexus, to the Lungs, Oesophagus, Thyroid gland, Trachea Pharynx & Larynx.

Q Give the distribution of the inferior Tracheal nerves

A. They filaments to the Trachea & Bronchia. they aid in forming the Ant & Post. Pulmonary Plexus

Q Other branches come from the Pneumogastric which behind the Trachea & Bronchia? to what are they distributed?

A On the Trachea. Bronchia. Oesophagus & assist in forming Post. Pulmonary Plexus.

Q Give the distribution of the Par Vagum after the branches mentioned?

A It gives branches to the Oesophagus & plexus is formed at the cardiac orifice of the stomach the right nerve is then distributed over the posterior surface in the lesser curvature reaching the Pylorus some branches join the solar plexus. The left

Descendens Noni: Hypoglossal
is distributed on the anterior surface
of the stomach branches of it also join
the solar plexus
Q. Give the origin of the Hypoglossal nerve
A It arises from the medulla oblongata
Q Through what does it escape from the
cranium?
A Anterior condyloid foramen
Q As it crosses the external carotid
artery it detaches a large branch what
is it called?
A Descendens noni
Q Give the distribution of the Des-
-cendens noni?
A On the Omohyoid and Sterno hyoid
and muscles of the Larynx
Q Upon what is the hypoglossal nerve
distributed?
A On the muscular structure of the
tongue

Glands

Salivary = Parotid. Submaxillary

Q. How many salivary glands and what called?
A 3 on either side; Parotid. Submaxillary. Sublingual.
Q Where is the Parotid?
A. On the side of the head, between the Mastoid process & Ramus of the lower Jaw.
Q. Of what does it consist?
A A number of lobules;
Q Has it an appropriate Capsule?
A. It has not
Q By what are lobules kept connected?
A. Prolongations from the fascia Superficialis
Q. What duct from the Parotid?
A. Of Steno.
Q Describe its course?
A Traverses the outer face of the masseter, at the anterior edge it perforates the adipose matter & the posterior end of the Buccinator.
Q Where is its oral orifice?
A. Opposite the second upper molar tooth.
Q Where is the Submaxillary Gland?
A. In a depression on the side of the neck formed by the body of the inferior maxillary. Mylo-hyoid, tendon of the digastricus.
Q By what are its lobules held together?
A By cellular substance.

Sublingual Gland. Pharynx

Q What artery passes through it?
A Facial.
Q What is its duct called?
A Wharton duct of.
Q. Where are the sublingual?
A Above the mylo-hyoid along the under surface of the tongue.
Q Has it more than one excretory duct?
A Has from 6 to 8.
Q What artery passes through it?
A Lingual.

Pharynx

Q Where is the Pharynx situated?
A. Between the cervical vertebrae, ant. post. part of nose & mouth.
Q To what does it run above.
A. Cuneiform process of occipitis. ant. point of the jugular fossa of temporal bone
Q To what in front?
A. Post. margin of upper maxilla. Cornua of hyoidy. side of the thyroid & cricoid cartilages
Q What below?
A. Continued into the Esophagus
Q What behind?
A. To the muscles on the bodies of the cervical vertebrae. by loose cellular substance.

Oesophagus & Lungs.

Q. How many coats has it?
A. Ext: Muscular. Middle: Cellular. Int: mucous
Q. How is the muscular coat formed ~~by three~~?
A. By three muscles. Called Constrictors
Q. With what does the Pharynx communicate?
A. Posterior nares, Eustachian tube. Mouth. Larynx & Oesophagus
Q. Where is the orifice of Eustachian tube?
A. On a line with inferior turbinated bone behind Posterior nares

~~Q. Give~~

Oesophagus

Q. Give the situation of the Oesophagus?
A. In front of the Spine & behind the trachea continuous with the Pharynx and the stomach below.
Q. Is its descent vertical?
A. It inclines to the left.
Q. What coats compose the Oesophagus?
A. Muscular Cellular & Mucous.

Lungs

Where is the essential seat of Respiration?
A. In the Lungs
Q. Are the Lungs in direct relation with the capacity of the Thorax?

Lungs & Pleura

Q. They are

Q. What is the figure?

A. An irregular cone. Apex above.

Q. Which surface is convex?

A. External.

Q. Which is the thickest ant or post. margin?

A. Posterior.

Q. On what do the Lungs repose below?

A. Diaphragm.

Q. Which of the three lobes of the right Lung is smallest

A. Middle

Q. What part of the lung is called the root?

A. The concave surface where the Bronchial ~~[illegible]~~ vessels enter.

Q. Commences at the Sternum and traverses the Pleura to the same point.

A. It lines the lateral parietes of the chest ~~and~~ in proceeding along the first rib, it forms a sort of bulging bag, which apex of the lung, it passes from the dorsal vertebrae to the post. part pericardium, then goes along the Pulmonary vessels, and bronchia on the post. part to the lung covering its post. lat. portion, then passing round the post. margin covering the Ext. rounded surface of the lung. passing over its ant. portion, covers the ant. Internal surface, then along the ant surface ~~[illegible]~~

Mediastinum & Larynx.

pulmonary vessels and bronchiae. to the Pericardium. covering the ant: surface to the middle line. then passes to the Sternum.

Mediastinum.

Q. Into what portions are the mediastinum divided?

A. Anterior. Posterior & Superior.

Q. By what is the ant: formed?

A. That portion of the two Pleuræ passing to the Sternum

Q. What is contained in the Posterior Mediastinum?

A. Descending Portion Thoracic Aorta. Œsophagus. Vena Azygous. And Par Vagum

Q. How is the Superior Mediastinum bounded

A. In front by the upper part of the Sternum laterally by the first ribs. behind by the first Dorsal vertebra.

Q. Where does the ductus arteriosus empty

A. Descending Thoracic Aorta.

Larynx

Q. Where is the Larynx?

A. Immediately below the os hyoides & root of the tongue. bounded behind by the Pharynx laterally by the Primitive Carotid arteries & Int Jugular veins

Cartilages & Ligaments of Larynx

Q. By what is the skeleton of the Larynx formed?

A. 5 Cartilages. Cricoid. Thyroid. 2 Arytenoid. Epiglottis Cartilages.

Q. By what is that prominence in the upper part of the neck formed the thyroid?

A. Pomum Adami.

Q. Where is the Epiglottis?

A. On the posterior face of the base of the os hyoides. being inclosed partially by the sides of the Thyroid Cartilages

Q. In what attitude generally?

A. Vertical. Its rounded margin elevated.

Q. What is the membrane attached to the Superior margin Thyroid & inferior margin Hyoid

A. Thyro hyoid Ligament. (middle)

Q. To what is the lateral Thyro hyoid Ligament attached?

A. Cornu major. Thyroid. Tuberculated extremity of the hyoid bone

Q. How many thyro Arytenoid Ligaments?

A. Two each side of the Larynx

Q. Give the attachments of the Inferior?

A. Extends from the ant angle arytenoid to inferior part of the entering angle of the Thyroid.

Q. — of the Superior?

A. Attached to the middle anterior edge of

(chia

Vocal Chords: Trachea. Bron

the arytenoid Cartilage & entering of angle of the Thyroid.

2. What are these Ligaments generally Called?
A. Vocal Cords.

3. What is that Space between the Superior and inferior on each side Called?
A. Sinus or ventricle of the Larynx.

3. What is the principal use of Epiglottis Cartl.
A. To prevent food or other articles from falling into the Larynx.

3. What part of the Larynx is essential to the formation of the voice?
A. The arytenoid Ligaments and space between.

3. Where is the Trachea? Ans. In front of Esophagus, opens in the Larynx above; terminates opposite 3d dorsal vertebra.

2. What is its structure? Ans. Cartilaginous, fibrous, muscular & mucous. 2. How are the Cartilages arranged? In about 20 distinct rings being incomplete for ⅓ posteriorly. 2. How is the fibrous structure arranged? Ans. It joins the proximate margins of the rings, it may be seen on the rings.

3. How is the muscular arranged? It supplies the deficiency of the Cartilaginous rings. 2. Which Bronchia is the longest before entering the lungs. Ans, the left. 2 inches, the right 1 inch.

2. What is situated about the origin of the Bronchia. Ans. Considerable number of black coloured Lymphatic Glands. 2. What difference in the cartilages of the minute division of the Bronchia. Ans. Only a small segment of a circle is formed by the Cartilage in these.

Abdomen.

Q. Give the situation of those lines usually marked by Anatomists to divide the Abdomen into different regions?

A. Consider a line from the Crista of the Ilium on one side to the other. then on each side a perpendicular line commencing just within the ant: Superior Spinous Process of the Ilium extending to the diaphragm. Extend ~~the 1~~ a fourth line parallel to the first & intersecting the two last when they come upon the false ribs.

Q How many regions formed by these lines.

A Nine.

Q What are the three upper called?

A Middle: the Epigastric. Right & Left Hypochondriac.

Q What 3 central?

A. Umbilical. Right & Left Lumbar.

Q. What "3" Lower?

A. Hypogastric. Right & Left Iliac.

Q. What is the hollow round the Ensiforme Cartilage called?

A Scrobiculus Cordis.

Q What organs in the three upper Regions?

A. Liver. Stomach: Spleen. Pancreas. Duodenum. & Part of the Arch of the Colon

Viscera of the Abdomen

Q What is the middle division?
A. Small intestines. Kidneys & Colon.
Q What is the Lower division?
A Urinary bladder, Rectum, Internal organs of generation.
Q Of how many kinds are the viscera of the abdomen in regard to their functions
A. 3.
Q What are they?
A Assimilation and digestion; Secretion & Excretion of urine & Reproduction
Q. What kind of a membrane is the Peritoneum
A. Serous membrane
Q. Of what is that line formed which may be seen on the Internal surface peritoneum, ascending from the umbilicus to the Liver?
A. ~~By~~ The umbilical vein that existed in the foetus in the adult the Round ligament of the Liver.
Q By what is that formed which descends along the median line to the bladder from the Umbilicus?
A By the urachus of the foetus.
Q By what are those formed which in passing from the umbilicus diverge and are attached to the side of the fundus of the Bladder?

Omentum & Stomach

Q. By the remains of the umbilical arteries of the foetus.

Q. What is that portion of the peritoneum from the Colon to the posterior wall of the abdomen called?

A. Meso Colon.

Q. What is that called which includes the small intestines?

A. Mesentery.

Q. What is that between the Stomach & Liver

A. Hepatico Gastricum, or Omentum Minus

Q. What is that attached to the transverse part of the Colon?

A. Omentum Magnum, or Gastro Colicum.

Q. What is the Route of the Omentum magnum or that which extends to the Spleen called.

A. Omentum Gastro Splenicum

Stomach

Q. When is the Stomach detected?

A. In the Epigastric & part of the left Hypochondriac.

Q. What is the figure of the Stomach?

A. Alone curved upon itself.

Q. How is the Stomach divided for Study?

A. Two faces. 2 Orifices, 2 Curvatures, 2 Extremities

Q. What are the orifices called?

A. Cardiac & Pylorus.

Stomach & Small Intestines

Q How are the curvatures designated?
A Small or upper = Greater or Lower
Q With what is the stomach in contact above?
A. The diaphragm. Left lobe of the Liver. Lobus Spigelii.
Q With what at its left extremity?
A Spleen.
Q With what at its greater curvature?
A Colon. & Meso Colon.
Q What lies beneath the Stomach and Spleen?
A. Pancreas
Q By how many Lamina is the Stomach formed?
A 4. Peritoneal. Muscular. Cellular or nervous & Mucous.
Q. Which is most resisting?
A. The Cellular.
Q What is formed by the mucous coat at the Pylorus?
A. A Valve.

Small Intestines

Q The small Intestines are divided into 3 portions what are they called?
A Duodenum. Jejunum & Ileum.
Q When do they commence and when do they end.
A Commence at the Pylorus and end in the Iliac Region.

Large Intestines

Q. How many coats have the small intestines
A. 4. Peritoneal, muscular, cellular & mucous.
Q. What are the mucous folds called?
A. Valvulae Conniventes. they give a larger surface from which absorption takes place
Q. Why is the duodenum so called?
A. From its being 12 fingers long.
Q. What ducts open into the duodenum?
A. Biliary & Pancreatic ducts
Q. How are the large intestines divided?
A. Cecum, Colon, & Rectum.
Q. How are the muscular fibres arranged?
A. into Equidistant fasciculi or bands
Q. What is the length of the Cecum?
A. 4½ to 3 inches
Q. What process attached to it?
A. Appendicula vermiformis
Q. What valve at the junction of the Cecum & Ileum?
A. Ileo Cecal valve.
Q. What is the first portion of the Colon called?
A. Ascending Colon
Q. Where is the transverse colon?
A. That portion of the Colon bounded above by the Stomach below by the ~~colon~~ small intestines
Q. What the next portion?
A. Descending Colon

Liver

Q. What is that portion in the left Iliac fossa?
A. Sigmoid flexure of the Colon.
Q. Is the Rectum completely covered by the Peritoneum?
A. No. the lower third is not.

Liver

Q. What part of the abdomen occupied by the Liver?
A. All the Right Hypochondrium, the upper half of the Epigastrium, the right superior part of the Left Hypochondrium.
Q. Is its upper surface convex?
A. It is
Q. What is the antero fissure on the under surface
A. The umbilical fissure
Q. What ligament attached to the superior surface directly opposite this fissure?
A. Suspensory Ligament.
Q. What vessels contained in the Transverse fissure
A. Vena Portarum, Hepatic artery & Duct.
Q. What is that elevation on the under surface of the Right Lobe. between the transverse fissure and posterior margin of the Liver?
A. Lobulus Spigelii.
Q. What ligaments attached to the Liver.
A. Falciform or suspensory. Right & Left lateral & Coronary.

Gall Bladder & Ductus.

Q. On what part of the liver is the sulcus or canal for the ascending vena Cava.
A. On the posterior margin near its middle
Q. What tunics has the liver?
A. Peritoneal, fibrous Capsule which frustrates the substance of the liver investing the acini
Q. By what is the vena portarum formed?
A. By the veins of the viscera of the abdomen —
Q. Of what do the acini of the liver consist
A. Each is an entire gland of itself.
Q. How does the Hepatic duct rise?
A. A branch arises from each acini. it leaves the liver at the Transverse fissure & unites with the cystic duct.
Q. Where is the gall bladder?
A. On the under surface of the great lobe of the liver
Q. With what does the lower surface of the gall bladder come in contact?
A. Transverse colon
Q. What is formed by the union of the Hepatic and cystic ducts?
A. Ductus communis Choledochus
Q. Where does it empty?
A. Into the Duodenum
Q. By what coats are the bile ducts formed?

Pancreas

A An external fibrous and an internal mucous

Pancreas

Q Give the situation of the Pancreas

A In the lower back part of the epigastrium it is bounded by the Spleen on the left the curvature of the duodenum on the right Stomach in front the less muscle of the diaphragm behind

Q By what is its appropriate tunic formed?

A A lamina of condensed cellular membrane which envelopes it and sends down processes into the substance

Q What is the structure of the Pancreas

A It consists of lobules of various forms united by cellular tissue

Q How does the Pancreatic duct take its origin and where does it empty?

A It rises from each of the small granular masses and terminates generally in the Ductus communis Choledochus

Q What is the office of the Pancreas?

Spleen.

A secretes a juice similar to sal-
-iva

Spleen.

Q Give the situation of the Spleen
A In the posterior part of the left
Hypochondrium bounded above by
the diaphragm below by the colon
the right Stomach and Pancreas left
by the parietes of the abdomen
Q By what ligaments is it fixed in
its place?
A The Gastro Splenic and the Splen-
-ico-Phrenic and the Splenico-colic
Q What coats has the Spleen?
A Peritoneal & Fibrous capsule
Q Does the Fibrous capsule penetrate
the Spleen?
A It passes down and forms cells
Q Do the branches of the Splenic artery
and veins anastomose with each
other?
A The arteries do not the veins do
Q Of what tissue is the Spleen?
A Erectile or Nervous
Q Into what does the Splenic vein
empty? Vena Portarum.

Kidneys

Q. What constitutes the urinary apparatus?
A. Kidneys. Renal Capsules, Ureters, Bladder, & Urethra.
Q. Where are the Kidneys?
A. In the posterior part of the Lumbar region extending from upper margin of the eleventh dorsal to the lower margin of the 2d Lumbar vertebra.
Q. Have the Kidneys any Ligaments?
A. No.
Q. What covering have the Kidneys?
A. Only one coat — the fibrous Capsule.
Q. Which is the largest extremity?
A. Superior.
Q. At what part do the vessels enter and leave the Kidneys?
A. On the internal margin at the Renal fissure
Q. Does the Kidney present a homogeneous appearance when cut longitudinally?
A. They present two kinds of substance
Q. What is the one near the periphery?
A. Cortical or secreting
Q. What is the internal portion called?
A. Tubular. Medullary. or Conoidal
Q. Of what is the Cortical part composed
A. Of arteries & veins ramifying among

Kidneys

granuform Corpuscules.

Q. Of what does the tubular portion consist?

A. Of from 12 to 18 conoidal fasciculi called Pyramids of Malpighi.

Q. How do the bases of these cones present?

A. To the Cortical. and are inclosed ~~from~~ by processes from it.

Q. Where do the tubuli uriniferi rise?

A. In the Cortical portion from each acini

Q. What are those membranous tubes called. which inclose the papillae or apex of the conoidal fasciculi?

A. Calix or Infundibulum.

Q. What number of these?

A. From 5 to 18.

Q. Where do they terminate?

A. In the Pelvis of the Kidney forming the commencement of the ureter.

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Bladder

Mouth

Q. Give the boundary of the mouth?
A. Anti: by the lips. Post: by the soft Palate & Pharynx, above by the Palatine processes of the maxillary and Palate bones & soft Palate laterally by the cheeks. below by the Mylo hyoides.
Q. What are offices of the Tongue?
A. An organ of Taste. aids in mastication & Speech.
Q. What is the Post: extremity called?
A. Base, attached to os hyoides
Q. To what of the maxilla inferior is the tongue attached?
A. Post: Mental tubercle.
Q. What is there situated on the post: part of the superior surface of the tongue?
A. Small mucipparous glands with a circular opening.
Q. What are the papillae ant: to these glands called?
A. Papillae maximae
Q. What are those ant: to the last?
A. Papillae minimae.
Q. By what is the frenum linguae formed
A. A duplication of the lining membrane
Q. What is the structure of the Tongue?
A. Muscular.

Tongue: Palate: Half Arches

Q. Which is the thickest the mucous membrane on the superior or inferior surface of the Tongue?

A. On the Superior

Q What is the epidermis on the Superior Surface of the Tongue called?

A. Periglottis.

Q How is the Palate of the divided?

A. Into the hard & Soft.

Q. By what is hard palate formed?

A. By the Palatine process of the Superior maxillar & palatine bones, covered above by the pituitary membrane & below a fibro-mucous membrane.

Q What is the structure of the Soft Palate?

A Muscular invested by a mucous membrane

Q What is the projection in the centre of the inferior margin?

A Uvula.

Q What are the two crescentic doublings of the lining membrane of the mouth proceeding from each side of the uvula called?

A. Lateral half arches

Q Where do they terminate?

A. The Ant. in the side of the tongue. The Post. in the lining membrane of the Pharynx.

Soft Palate & Muscles

Q. Which of the half arches is most distinct?
A. The anterior.
Q. What is that space called between the half arches?
A. Fauces
Q. What is situated in a depression in the Fauces?
A. Tonsil Gland.
Q. What is the natural appearance of the gland?
A. On the integral surface are numerous excavations & foramen which may be taken for disease by the inexperienced.
Q. What do you understand by the Isthmus of the Fauces?
A. The space bounded by the anterior half arches.
Q. How are the muscles of the soft palate divided?
A. Intrinsic & Extrinsic.
Q. How many intrinsic?
A. One only. Azygos Uvulæ.
Q. Name the Extrinsic
A. Constrictor Isthmi Faucium. Palato-Pharangeus, Circumflexus, Levator Palati.

Vertebral Column

2. How would you distinguish the cervical vertebrae from those of the Dorsal
A. Their Spinous processes are bifurcated and their body before are thicker and their inferior surface is concave
2. What difference is there in their transverse processes
A. Those of the cervical have foramens for the transmission of arteries & veins
2. What difference is there between the Dorsal & Lumbar vertebrea
A. On each side of the junction of the Dorsal is a hole or fossa for the reception of the ends of the ribs, and their spinous processes are more angular and long overlapping each other
2. What difference is there in their bodies
A. The Dorsal vertebrae are not so thick before as the Lumber
2. What difference is there in the Lumber vertebrae from the rest
A. It is larger, its body is thicker before than the Dorsal, its spinous process is quadrilateral and the bone is more horizontal

Regional characteristics. "Cont."

Q. If I were to present a spinous process of one of the cervical vertebrae to you how would you know that it was such

A. By it being shorter, grooved on its anterior surface and bifurcated

Q. How would you distinguish the transverse processes of this region

A. By being smaller, bifurcated and having a foramen passing through their base

Q. For what purpose is this foramen

A. For the transmission of the vertebral artery & vein

Q. How does the ~~[illegible]~~ spinal canal differ from the other vertebrae

A. ~~[illegible]~~ It is larger & the transverse diameter is greater than the anterior posterior one

Q. What provision of nature does this answer

A. A free motion to the cervical vertebrae without injury to the medulla spinalis

Q. How does the foramen spinale in the Dorsal vertebrae differ from that of the other two

A. It is smaller and of the same diameter each way.

Q. What difference is there in their bodies

A. They are more round than the others and have facets at their junction with each other for the ribs
Q. How does the transverse process differ
A. They are longer and stouter and extend outwards & backwards
Q. Do the ribs touch these processes
A. Yes sir
Q. At what point
A. At their extremity
Q. Are all of the transverse processes of the same length
A. No sir
Q. What is the difference
A. The tenth vertebra has such a short transverse process that the rib does not touch it
Q. What difference is there in the oblique processes
A. The superior are flat and present almost backwards, the inferior also flat & present forwards
Q. How do the spinous processes differ
A. They are triangular, with a broad base and overlap each other like the shingles on the roof of a house

Q. How would you distinguish the first dorsal vertebra
A. From its resembling the cervical & having a distinct articulation for the head of the first rib,
Q. What is the peculiar difference in the lumbar vertebrae from the rest
A. Its size, transverse diameter largest,
Q. How does the spinous process differ
A. Broader, larger & Quadrilateral
Q. What difference in their transverse processes
A. They are long and stand out at right angles
Q. What difference is there in their articulations from the rest
A. The superior articulate on the inner surface and the inferior on the outer surface
Q. For what use is the foramen below the different vertebrae
A. For the transmission of the spinal nerves
Q. How many points of ossification are there in the bone
A. Five; one for the spinous process, one for each transverse process, & one for the superior & another the inferior, rings of the body of the bone

Q. Do the sides of the angular arch unite by the ossification before they do with the body?
A. They unite together first.
Q. What is the shape of the sacrum?
A. Wedge, both inferiorly & posteriorly
Q.

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Clavicle

What is the term clavicle derived from

A – Resemblance to an ancient key –

What three circumstances distinguish this bone right from left –

A – The sternal extremity is always the largest – 2nd Superior surface is smooth while inferior surface is rough – 3rd a convexity at sternal extremity and concavity at external extremity –

What does it articulate with at external extremity

A – With acromion of scapula –

What muscles are attached to this bone –

A – There are 6 – pectoralis major, deltoid and subclavius, and to inferior and posterior surfaces, [illegible] – [illegible] muscles

What use of this bone

A – It is a key to protection of upper extremity –

Scapula

2 Is it divided
a into 3 borders, 3 angles and
3 surfaces
2 How is the dorsum or back divided
a into supra spinatus fossa and
~~sub~~ infra spinatus fossa —
2 What muscle in the under
surface
a Subscapularis —
2 What passes through the supra
spinatus notch
a Suprascapular nerve
2 Is the transverse ligament attached
to this bone
a Yes
2 What is attached to spine
a Trapezius and deltoid
2 What to base
a Levator scapulae, rhomboidei
major & minor and deltoid
2 What of the notch on superior
border
a Omo-hyoid
2 To what muscle is it the
a Is it tendinous long head of triceps

[illegible] cubiti
[illegible] lobus to inferior angle
[illegible] Dens primarius
[illegible] lobus to posterior [illegible]
[illegible] tonsa vertebralis, pectoralis,
[illegible] minor and short-heading biceps
[illegible] lepor cubiti.

[illegible]

[illegible] The

[illegible] Account of [illegible]

[illegible] religious [illegible]

[illegible] [illegible]

[illegible] many [illegible]

[illegible]

[illegible] superior [illegible] explanation.

[illegible]

Questions.

Q. What muscles are at [illegible]
to the [illegible]

A. [illegible]

Q. [illegible]
what [illegible]

A. [illegible]

Q. [illegible]

A. [illegible]

Q. [illegible]

A. [illegible]

Q. [illegible]

A. [illegible]

Q. [illegible]

A. [illegible]

Q. what [illegible]
[illegible]

A. [illegible]

Q. what do the [illegible]
[illegible]
of Tendons & [illegible]

204 Sphenoid.

Q. What passes through the optic foramen.
A. Optic nerve and opthalmic artery.
Q. What passes through the sphenoidal fisure.
A. The third and fourth nerve — first branch of the fifth and sixth pair.
Q. What through the foramen ovale.
A. The third branch of the fifth pair of nerves.
Q. What passes through the foramen rotundum.
A. The second branch of the fifth pair of nerves.
Q. What artery passes through the foramen spinale.
A. The middle artery of the dura mater.
Q. What muscles are attached to the under surface.
A. The constrictor pharyngis superior, & tensor palati.
Q. What tendon passes over the hook-like process of the pterigoid —

Sphenoid

process.
A. The tendon of the circumflex, or extensor muscle of the palat.
2. What foramen at the base of each Pterygoid process.
A. The Vidian foramen.
2. Of what nerve is the Vidian nerve a branch.
A. A branch of the second branch of the fifth pair.

On bones of Head

2 = What may the head be considered
A = An enlarged or expanded vertebra
2 = Does it present all the distinctive marks of a vertebra
A = Yes Sir
2 = What part corresponds with the spinous process of a vertebra
A = The occipital spine or ridge
2 What the transverse processes
A = Mastoid portion of temporal bone
2 What the articular - A = condyles of the occipital = 2 = What with spinal foramen
A = Foramen magnum

Superior Maxillare

* Q. What passes through the Infra-orbital foramen.
A. Superior Maxillary nerve and infra orbital artery.
~~Q. What deep depression~~
Q. What muscles are attached in the canine fossa.
A. The Compressor nasi and Levator-anguli oris.
Q. What fossa beneath the nasal-spine
A. The Incisive or myrtiform fossa
Q. What arises from this fossa
A. The depressor-labii superioris-alaeque nasi.
Q. What groove is on the posterior surface of the nasal process of this bone
A - The lacrymo-~~nasal~~ nasal or ductus ad nasum
Q Does this bone form any part of the wall of orbit
A = almost the entire floor
Q = For what purpose is the horizontal ridge on posterior surface of the nasal process of this bone —
A = For articulation with the

middle turbinated bone of ethmoid
Q = What is that small depression or excavation just below the first horizontal ridge –
A = It corresponds with middle meatus of nose
~~Q = Is the orifice of antrum high-mouran~~ ~~A~~
Q = By what is the orifice of antrum highmore diminished by palate bone behind – ethmoid above – and inferior turbinated bone below –
Q = Does the maxillary sinus ever communicate with frontal sinus
A = yes sir
Q = By what means
A = Anterior ethmoidal cells
Q = For what use is that fissure which exist between orbitear and nasal process
A = For accommodating os unguis and lachrymal [redacted] sac

Palate Bones

Q Where situated
A = Between superior maxillary and sphenoid bone
Q How much of the bottom of nose does this bone form
A = about 1/3
Q = ~~Fro~~ Where does the azygos muscle arise
A = From ~~inferior portion~~ internal extremity of posterior margin of horizontal plate =
Q = What portion of this bone is received into the bifurcation of the two plates of pterygoid process of sphenoid
A = The tuberosity
Q = How many grooves the tuberosity of this bone present
A = Three
Q = For what purposes
A = The internal receives the internal pterygoid process of sphenoid, the external receives the external process of same bone and middle is continuous with pterygoid fossa of sphenoid bone —

2 = Where is the posterior Palatine foramen

a = Between external surface of nasal plate and base of tubercle

2 =

Vomer

Q. where is this bone situated?
A. Between the nostrils
Q. How many margins has this bone?
A. Four.
Q. which is broadest?
A. The superior.
Q. what is received in the furrow on the superior surface?
A The azygous process of the sphenoid bone.
Q. with what does the inferior margin articulate?
A. with the spine or ridge of the superior maxilary and palate bones, which exist at this internal border.

Muscles

Q Do anatomists agree as to number of muscles.
A = No sir
Q: What is a lever
A An inflexible rod some portion of which as a fixed point

Q How many kinds ~~are there~~
A Three
Q What is the first
A = where the power is at one extremity the weight at the other and the fulcrum between
Q What is the second
A = Where the fulcrum at one end the power at other and weight in the middle
Q What is the third and last
A - Where power is in middle
Q - Which is most advantageous as regards the weight to be raised
A = The second kind
Q Which is most common in human subject
A = The 3 kind or where power is in middle
Q = What advantage has this kind
A = It combines extent with celerity of motion
Q Is it important to understand these principles in order to fully comprehend the action of muscles
A — yes sir

Q What portion of Linea alba is widest?
A = Above the umbilicus
Q = Are there any openings in Linea alba?
A = yes Sir
Q = For what purpose?
A = passage for vessels and nerves
Q = Does these foramina ever become the cause of hernia?
A = yes Sir
Q - Explain how it can be so?
A = Around these foramina fat become developed and dilate it - and in case of emaciation the fat become absorbed and is liable to hernia or protrusion -
Q = By what rule would you ascertain the Semilunar lines?
A = From midway between the anterior superior spinous process of ilium and umbilicus draw a slightly curved line upward as far as ensiform cartilage and downwards as low as symphysis pubis

Q = How is fascia lata divided?
A = Into Pubic and Iliac
Q What opening in fascia lata?
A = Saphenous opening
Q = What is the cribriform fascia
A - In the interval between the falciform border of the portion and the ascending ramus of pubic portion -
Q What coverings has the femoral hernia?
A = Integument, superficial fascia, cribriform fascia, fascia lata or propria, septum crurale and peritoneum &c
Q = How do you bound femoral hernia
A = Anteriorly by poupart's ligament - behind by crest of pubis - externally the femoral vein and artery - internally by falciform ligament
Q = What difference in the coverings of oblique and direct hernia
A = Substitute the conjoined tendon of internal oblique and transversalis

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for remarks—

Tensor vaginae Femoris.

Q. what are its relations?
A. By its superficial surface with the fascia lata & integument. posteriorly by the deep seated fascia, gluteus medius, rectus vastus externus. Internally by the sartorius.

+ Sartorius.
Q. How is it situated with respect to the femoral Artery?
~~A. It lies externally to it~~
+A. Exterior at each extremity & covers it a little its middle
Q. what are its relations?
A. Is covered superficially by the fascia lata. posteriorly by the psoas & iliacus, rectus, vastus internus, adductor longus, adductor magnus & gracilis.

+ Rectus Femoris.
Q. How does its fibres run?
A. Obliquely from a central line.

 Rectus Femoris

Q = What are its relations superiorly?
A = Gluteus medius, psoas and iliacus internus and sartorius and for 3/4 of its lower extent fossa falta
Q What are its relations posteriorly?
A = Crureus, Vastus internus and externus

Vastus Externus.

Q What relations superiorly?
A = Rectus, biceps, semi membran and gluteus maximus
Q What are its relations posteriorly?
A = Crureus and femur

Vastus Internus.

Q = What relations superiorly?
A = Psoas and iliacus, rectus sartorius, femoral artery, pectinis adductor longus, magnus et brevis
Q = What posteriorly?
A = Crureus and femur.

Crureus.

Q What relations superiorly?
A = Rectus, vastus externus and internus.
Q = What posteriorly?
A = Sub-crureus.

Q = What is the use of tensor vaginæ femoris?
A = Makes fascia lata tense and rotates inwards and extends the leg upon thigh.
Q = The use of Sartorius?
A = Flexes leg upon thigh and thigh upon pelvis and adducts.
Q = What use of gracilis externus?
A = Extends leg upon thigh and maintains erect posture.
Q = Pectineus.
Q What are its relations?
A = anteriorly by fascia lata - posteriorly obturator externus - adductor brevis and externally psoas and internal with adductor longus
Q What use has pectineus.
A = bends thigh upon pelvis and rotates limb outwards
Q Adductor Longus.
Q What relations has it?
A = Posteriorly with adductor brevis and magnus - externally with pectineus inner border gracilis.
Q What use has it?

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Peter Jones

Q = Same as pectineus

× Adductor Brevis.

Q = Its relations explain?

A = Anteriorly by pectineus adductor longus — posteriorly adductor magnus extending with obturator externus inner border by gracilis and adductor magnus —

× Adductor Magnus.

Q — Explain its relations?

A = Anteriorly by pectineus, adductor brevis & longus — posteriorly ~~semitendinosus~~ semitendinosus, semimembranosus biceps, glutæus maximus — and anteriorly gracilis and sartorius.

× Gracilis.

Q — Its relations explain?

A — By its superior surface with fossa ovalis — & internal deep surface adductor longus, magnus, et brevis —

Q — What are the muscles?

A — Adductors:

Sartorius muscle of the head

* Gluteus Magnus.

Q. what is the situation of this muscle?

A. Beneath the skin and superficial fascia. & covers the semitendinosus, semi-membranosus & long head of the biceps.

Q. what are the uses of this muscle.

A. To draw the thigh backwards and keep the trunk erect.

* Gluteus medius.

Q. What covers the posterior inferior part of this muscle?

A. The gluteus maximus.

Q. what is its use?

A. Draw the thigh backwards & outwards.

Q. Give the origin & insertion of the gluteus minimus?

A. From the dorsum of the Ilium between the semicircular ridge and the margin of the capsular ligament of the hip joint & inserted into the anterior superior part of the trochanter major.

Q. Its use?

A. It abducts the thigh & can also

the link inwards.

Q. How much of the heart is there ~~free from~~ covered by the lungs?

A. All, except about an inch and a half in front.

Q. What sound is given by percussion over the uncovered part?

A. A dull sound.

Q. What sound is given by that covered by the lungs.

A. Hollow sound.

Q. How ~~have~~ the sounds of the heart be accounted for?

A. In a variety of ways: some suppose, the contraction of muscular fibres causes them: others that they are caused by the friction of the heart with the pericardium: and others that they are caused by the heart striking against the walls of the chest: others that they are caused by the opening and shutting of the valves.

Sounds of the Heart

Q. What did Dr. Newton say of the sounds being caused by the contraction of the muscular fibres?

A. He said, the sounds caused by the contraction of muscular fibres was very different to those of the heart — the contraction of the fibrie causing a rumbling sound.

Q. What of its being caused by friction with the pericardium?

A. He said this would produce a blowing sound.

Q. What did he say of these being caused by the hearts striking the chest?

A. He thought improbable.

Q. What did he say of Magendie's experiment with the chicken?

A. He said Magendie heard too much, when he both sounds of the heart by applying the

sounds of the Heart

stethescope in immediate contact with the heart.

Q— What did Dr Newton say of the sounds of the heart being caused by the valves?

A— He said this was most probably correct.

Q— Why did he think so?

A— First becaus it has been proved by the doctrine of exclusion, and also becaus the valves are more likely to produce the sounds of the heart.

Q— Which valves give the dull sound?

A— the tricuspid & mitral valves.

Q— which the sharp sound?

A— semilunar.

Q— What is the course of the aorta?

A— It arises from the left ventrical, arises towards the right side for half an inch then forms a curve to the left and descends along the spinal column until

Aorta

it comes to, Aorta between the fourth & fifth dumbar vertebrae, where it divides into the right and left iliacs.

Q. What arteries arise from the curve of the aorta?

A – The arteria innominata. left primitive carotid and left subclavian.

Q – What relations has the arch of the aorta?

A. On the right side the vena cava descendens. anteriorly by the lungs – posteriorly by the trachea & esophagus.

Q – what arise from the commencement of the aorta?

A – The coronary arteries.

Q.

Q How is the femur divided?
A Into Shaft, Superior & Inferior Extremi-
Q What is ~~Inserted~~ inserted into the Depression on the head of the bone just below its center?
A Ligamentum Teres or Round Ligament of the hip joint
Q What is that portion of the bone called on which the head rests?
A The neck
Q Does it vary in obliquity at various periods of life?
A Yes Sir it is long & oblique in
Q the adult & short & almost horizontal in the aged.
Q What is attached to the anterior facet of the Trochanter Major?
A Gluteus Minimus Muscle
Q What muscle is attached above this?
A Gluteus Medius.
Q What is the vertical ridge on its posterior side called?
A Linea Quadrati.
Q What muscle is attached to this ridge?
A Quadratus Femoris muscle
Q What is the Pit called on the inner side of the Trochanter Major?
A Trochanteric or Digital Fossa
Q What Muscles are inserted into this fossa?

Perineum

A Pyriformis, Gemellus Superior & Inferior & Obturator Exter & Internus Muscles —

Q What is the line called that passes from one Trochanter to the other on the front of the Bone ?

A Anterior Intertrochanteric line. —

Q Is there also a posterior Intertrochanteric line?

A Yes Sir. —

Q ~~Into~~ how many branches does the Linea aspera Divide at its Superior ~~&~~ how many at its Inferior Extremity?

A 3 at its Superior & 2 at its Inferior. —

Q Which condyle is the Longest?

A Internal —

Jos A Eve M.D.
L A Hughes
J D Gavin
W P Miller
A Means
G A Newton
L L Ford
constitute the Faculty
of the Medical
College of Georgia

Hernia

Q. What do you understand by hernia?

A. The protrusion of a viscus through the abdominal cavity, [illegible] by [illegible] or tumor.

Q. How many kinds of hernia are there?

A. Three — ventral, umbilical and femoral hernia.

Q. How many coverings have the ventral hernia?

A. Six — integument, superficial fascia, muscular layer, [illegible] fascia, [illegible] and peritoneum.

Q. How many coverings have the umbilical hernia?

A. Four — integument, superficial fascia, [illegible] and peritoneum.

Q. Describe the femoral hernia.

A. It is known by the [illegible] in the femoral canal, [illegible]

Hernia

Give the Origin & Ins of Tibialis Ant
A Arises from upper 2/3 of Tibia from the Interosseous membrane & Deep fascia — Inserted into Inter Cuneiform bone & base of metitarsal bone of great toe
2 Give the Origin & Inser of Extensor Longus Digitorum?
A Arises from head of Tibia & upper 3/4 of the fibulae, Interos Membrane & Deep fascia — Insert & tendons into all the phalanx of all the smale toes
2. use A flexes the foe & foot
2 Give the situation, origin & Insert of Extensor Proprio Pollicis
A It lies between the the two last muscles & arises from lower 2/3 of fibulae & Interosseous membrane & is Insert into the base of last phalanx of the great toe
2 What lies [redacted] the Intermuscular space we find between these Muscles
A the Anterior tibial artery

Heart

Q. What are the organs of circulation?
A. The Heart, Arteries, Veins & Capillaries.
Q. What is the Heart?
A. It is a hollow, muscular sac
Q. What is that membrane called which encloses the Heart?
A. The Pericardium.
Ques. What is the Pericardium, & of how many layers does it consist?
Ans. It is a fibro-serous membrane & consists of two layers, - an external fibrous and an internal serous one.
Ques. What is the position of the Heart in the chest?
Ans. It is placed obliquely in the chest, the base being directed upwards & backwards towards the right shoulder, the apex forwards & to the left pointing to the space between the 5th & 6th ribs, about two or three inches from the Sternum.
Ques. Give the course of the circulation, commencing at the right auricle?
Ans. It is received into the right auricle from the two Cavae, thence it passes into the right ventricle which sends it

through the Pulmonary artery to the Lungs for the purpose of aeration - after which it is returned by the four Pulmonary veins to the Left Auricle, whence it enters the Left Ventricle which propels it through the Aorta to the various parts of the Body.

Ques. How may the Heart be divided for study?

Ans. Into two Auricles & two Ventricles.

Ques. Which Auricle is the largest?

Ans. The right.

Ques. How is this Auricle divided?

Ans. Into a cavity or sinus, & an appendix Auriculae.

Ques. How many openings into this cavity?

Ans. Five.

Ques. What relics of foetal structure in this Auricle?

Ans. Annulus ovalis & fossa ovalis, the remains of the foramen ovale.

Ques. What valves in this Auricle?

Ans. The Eustachian & Coronary valves.

Ques. What are the musculi pectinati?

Ans. They are small muscular columns situated in the Appendix Auriculae.

Ques. How many openings in the Right Ventricle & what are they?

Ans. Two - the Auriculo-Ventricular and the Opening of the Pulmonary Artery.
Ques. How many valves have they?
Ans. The Tricuspid & Semilunar valves.
Ques. What are those fleshy columns called, seen on the internal Ventricular Surface?
Ans. The Columnae Carneae.
Ques. What are the Chordae Tendineae?
Ans. They are the tendons which connect these fleshy columns with the valves?
Ques. What is the use of these Chordae Tendineae?
Ans. They serve as muscles to the valves - to effect their occlusion.
Ques. What are the Sinuses called which are formed by the Semilunar valves?
Ans. The Sinuses of Valsalva.
Ques. What do you understand by the Corpusculum Arantii?
Ans. It is a Tubercle which exists on the margin of the Semilunar valves at their centre.
Ques. How many Pulmonary Veins open into the Left Auricle?

Ans. Four. two from each Lung
Ques. What is the structure of the Heart?
Ans. It consists of muscular fibres disposed in strata?
Ques. How are these fibres arranged?
Ans. In a spiral form.
Ques. How do you account for the difference in thickness of the ventricular walls at the apex & base of the Heart?
Ans. It is owing to the fact that these muscular strata have a common origin from the base of the Heart, but all of them do not extend to the apex - giving it the appearance of having been beveled at the expense of the internal surface.
Ques. With what disease did Sir Newton says affections of the Heart were often coincident, or dependent upon?
Ans. Acute articular Rheumatism
Ques. What practical observation did he make upon this subject?
Ans. That any Physician who treated a case of acute articular rheumatism without paying constant attention to the Heart, was guilty of gross neglect to his patient.
Ques. How many sounds are given by the Heart?

Ans Two.

Ques. How do you distinguish the two?

Ans. The first sound is dull, prolonged & is synchronous with the pulse — the second is clear, more sonorous — and is heard in the interval between the pulsations of the artery felt at the wrist.

Ques. What theories have been projected in order to account for these sounds?

Ans — Some supposed they were caused by the friction of the heart against the pericardium — Some by the friction of the blood against the ventricular walls — Some by the contraction of the muscular fibres of the heart — others that they were produced by the heart striking against the walls of the chest — & others again by the contraction of the valves —

Ques. What objection did Dr Newton urge against the production of these sounds by friction?

Ans. That friction would produce a blowing sound — entirely different from that of the heart.

Ques — What objection to the theory of muscular contraction?

Ans. Muscular contraction produces a rumbling, roar sound.
Ques. What did he say of Magendie's experiment with the chicken egg?
Ans. That it proved too much when he applied the stethoscope to the heart he should have heard but one sound.
Ques. When a portion of the thoracic wall is removed why can you not hear the two sounds by approximating your ear?
Ans. Because there are some sounds which you cannot hear when a portion of air intervenes.
Ques. To what cause did Dr. A. attribute the sounds of the heart?
Ans. To the contraction of the valves.
Ques. What valves produce these respective sounds?
Ans. The first or dull sound is produced by the contraction of the auriculo-ventricular valves. The second by the contraction of the sigmoid or semilunar valves.
Ques. Will this origin explain the difference in the sounds — how?
Ans. It will — the auriculo-ventricular valves being broader & thicker give the dull sound — while the semilunar valves

being narrower & more compact & with a sound, clearer, & more sonorous.
Ques. What Pathological fact would go to establish the truth of this theory?
Ans. That these sounds are unaffected by any disease of the Heart, which does not involve the valves.

Private Massachusetts 1st

Scott 1 Fifer
Harris 2
Pentecost 3
Parker 4
Holcombe 5
Saunders 6
Saunders 7
Doughty 8
Nelconghton 9

Privately Clyde & written / 1857

Parker
Harris
Scott
Holcombe
Pentecost
Saunders
Saunders
Filson
Filson is dead

Medical Colledge
of Georgia

Dr Jos A Eve
Professor
of
Obstetrics &
Diseases of
Women & Children

February 10th / 5-1

Medical College of Geo
Feb 10th 1854 Number of Students 105

Barber	
Stevens	Glass
Saunders	Parker
Sanders	Jones
Scott	Scott
Pentecost	Saunders
Holcombe	Saunders

J. C. Glover
H. R. Pierce
W. B. Knight +
A. C. Hart +
L. T. Simmons +
H. C. Dryer +
D. M. Farbrough +
Wm. L. Austin +
C. C. Lanier
J. M. Bunch
L. Lessing +
W. B. Parker +
Lewis Gibson +
W. B. Samuels +
B. Bowers +
D. M. Bowie +
B. O. Sullivan +
Reeves
Frank Fitten +
W. D. Tuigg +
Enoch McKey +
Thomas Ward +

A. A. Pernigan
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1850

J. 1850

Class
of
1847 & 48

1 Cooper
2 Simmons
3 Antony
4 Gibson
5 Johnson
6 Pernigan
7 Oliver
8 Rhodes
9 Burke
10 Thomson
11 Durham
12 Williams

Class
of
1850
&
1851

Febuary
3rd
1851

Medical College of Georgia

Medical College of Georgia 1847

Dr Jos. A Eve

Dr Joseph A. Eve

professor of

Obstetrics and diseases of Women and Children

January 2nd

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× J. P. Hillhouse . A. C. Harris
× J. Rambo . T. B. Phinizy ×
× G. W. Weeks . F. Murphy –
× F. Tannelly . S. Beggs.
Ha Dr Colly ×
× R. Campbell . Private. class.
× J. Holly . × . Graduated

1 oz Clorida 80d
72 " water

15
15
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20
115

Joseph A. Eve 48 pills

48 gd 300 of Oil
96 gd Hyoscyamus

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800
3050
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2825
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5275

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3000
225
3225

56
30
560
224+2

150